

June 25, 2026



Initial Lightbridge Fuel™ Material Samples Removed from Idaho National Laboratory's Advanced Test Reactor

RESTON, Va., June 25, 2026 (GLOBE NEWSWIRE) -- Lightbridge Corporation ("Lightbridge" or the "Company") (Nasdaq: LTBR), an advanced nuclear fuel technology company, today announced that the first batch of its fuel material samples undergoing irradiation at the Idaho National Laboratory's (INL) Advanced Test Reactor (ATR) have been successfully removed and will now be cooled down over the next several months in preparation for post-irradiation examination, which is expected to begin later this year.

The samples were removed on May 6, 2026, with Lightbridge's full-time fuel engineering team and senior management — 24 Lightbridge personnel in total — on site at INL for the milestone. On May 7, the Lightbridge team met with the INL personnel leading the project, including John Wagner, Laboratory Director of Idaho National Laboratory, and Jess Gehin, Associate Lab Director. Lightbridge discussed progress to date and the path forward across multiple Lightbridge projects currently underway at INL.

"The data already developed at the Advanced Test Reactor is a meaningful validation of the innovation and engineering behind Lightbridge Fuel," said Seth Grae, President and Chief Executive Officer of Lightbridge. "The data to be collected during the planned post-irradiation examination are expected to support our ongoing fuel performance modeling activities and regulatory licensing efforts for commercial deployment of Lightbridge Fuel. We are grateful to Lab Director John Wagner, Associate Lab Director Jess Gehin, and the entire INL team for the operational excellence that has made this campaign possible."



Image 1: The combined Lightbridge and Idaho National Laboratory Team (May 7, 2026)

The fuel material samples are being tested under the Fission Accelerated Steady-state Testing (FAST) method, an accelerated irradiation technique that uses Highly Enriched Uranium to reach high burnup conditions faster than conventional test methods. The FAST method was conceived and developed at INL. Geoffrey “Boone” Beausoleil, Lightbridge’s Director of Materials, played a key role on the INL team that originated the initial concept for FAST and developed the underlying testing methodology during his prior tenure at INL.

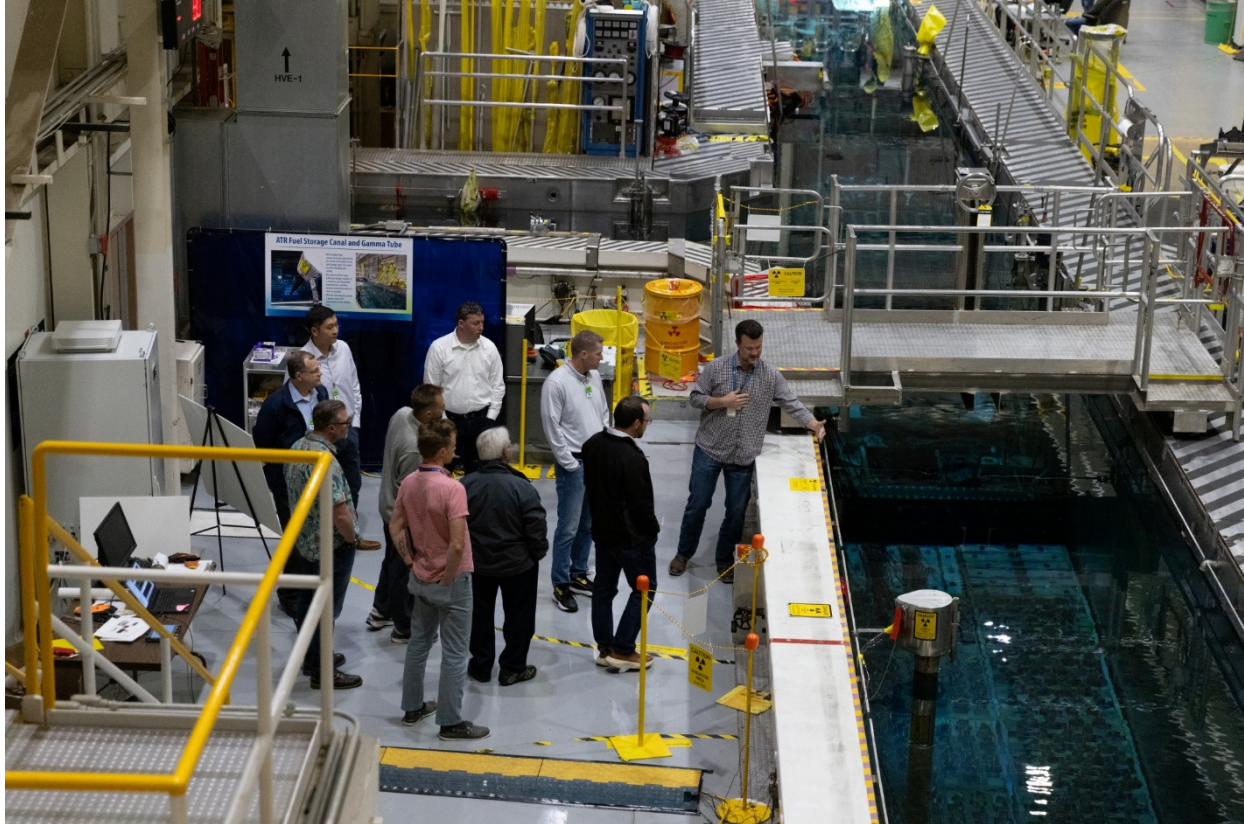


Image 2: Several members of Lightbridge team looking over the ATR canal (May 6, 2026)

The samples that have been removed from the ATR will undergo post-irradiation examination to collect the data on fundamental material properties under high-burnup irradiation conditions. The data developed will support the broader testing program aimed at confirming the safety, performance, and economic advantages of Lightbridge Fuel relative to conventional nuclear fuel used in commercial reactors worldwide.



Image 3: A capsule with an irradiated Lightbridge coupon sample inside after removal from the ATR (May 6, 2026)

"The Advanced Test Reactor is the world's most powerful test reactor and provides unique national capabilities. The data being generated from this campaign with Lightbridge contributes to the broader scientific understanding of advanced nuclear fuel performance under irradiation," said John Wagner, Laboratory Director of Idaho National Laboratory. "Public-private partnerships of this kind are central to INL's mission of accelerating the development of new nuclear technologies, and we look forward to continuing this work with the Lightbridge team through post-irradiation examination and the additional testing campaigns ahead."



Image 4: Lightbridge team in front of the ATR facility (May 6, 2026)

About Idaho National Laboratory

Battelle Energy Alliance manages INL for the U.S. Department of Energy's Office of Nuclear Energy. INL is the nation's center for nuclear energy research and development, and also performs research in each of DOE's strategic goal areas: energy, national security, science and the environment. For more information, visit www.inl.gov. Follow us on social media: [Facebook](#), [Instagram](#), [LinkedIn](#) and [X](#).

About Lightbridge Corporation

Lightbridge Corporation (NASDAQ: LTBR) is focused on developing advanced nuclear fuel technology essential to delivering abundant, zero-emission, clean energy and providing energy security to the world. The Company is developing Lightbridge Fuel™, a proprietary next-generation nuclear fuel technology for existing light-water and pressurized heavy-water reactors, significantly enhancing reactor safety, economics, and proliferation resistance. The Company is also developing Lightbridge Fuel for new small modular reactors to deliver the same benefits, plus load-following with renewables, on a zero-carbon electric grid.

Lightbridge has entered into two long-term framework agreements with Battelle Energy Alliance, LLC, the United States Department of Energy's operating contractor for Idaho National Laboratory, the United States' lead nuclear energy research and development laboratory. DOE's Gateway for Accelerated Innovation in Nuclear program has twice awarded Lightbridge to support the development of Lightbridge Fuel over the past several years. An extensive worldwide patent portfolio backs Lightbridge's innovative fuel technology. Lightbridge is included in the Russell 2000® and Russell 3000® Indexes. 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>

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Lightbridge is on X (formerly Twitter). Sign up to follow [@LightbridgeCorp](https://twitter.com/LightbridgeCorp) at <http://twitter.com/lightbridgecorp>.

Forward Looking Statements

With the exception of historical matters, the matters discussed herein are forward-looking statements. 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: Lightbridge's ability to commercialize its nuclear fuel technology, including risks related to the design and testing of nuclear fuel incorporating its technology and the degree of market adoption of Lightbridge's product and service offerings; dependence on strategic partners; any adverse changes to Lightbridge's agreements or relationship with the U.S. government and its national laboratories; Lightbridge's ability to fund its future operations, including general corporate overhead and outside research and development expenses, and continue as a going concern; the future market and demand for Lightbridge's fuel for nuclear reactors and its ability to attract customers; Lightbridge's ability to manage the business effectively in a rapidly evolving market; Lightbridge's ability to employ and retain qualified employees and consultants that have experience in the nuclear industry; competition and competitive factors in the markets in which Lightbridge competes, including from accident-tolerant fuels; access to and availability of nuclear test reactors and the risks associated with unexpected changes in Lightbridge's nuclear fuel development timeline; access to and availability of adequate resources and manufacturing capabilities at national laboratories that affect our nuclear fuel development timeline and project costs; Lightbridge's ability to deploy and operate a dedicated nuclear fuel fabrication facility; the increased costs associated with metallization of Lightbridge's nuclear fuel; uncertainties related to conducting business in foreign countries; public perception of nuclear energy generally; changes in laws, rules, and regulations governing Lightbridge's business; changes in the political environment; development and utilization of, and challenges to, Lightbridge's intellectual property domestically and abroad; the volatility of the trading price of Lightbridge's securities and the potential for purchasers of its securities to incur substantial losses; and other factors described in Lightbridge's filings with the Securities and Exchange Commission (the "SEC"). Lightbridge does not assume any obligation to update or revise any such forward-looking statements, whether as a 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, 2025, and in its other filings with the SEC, 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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Photos accompanying this announcement are available at:

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Image 1



Image 1: The combined Lightbridge and Idaho National Laboratory Team (May 7, 2026)

Image 2

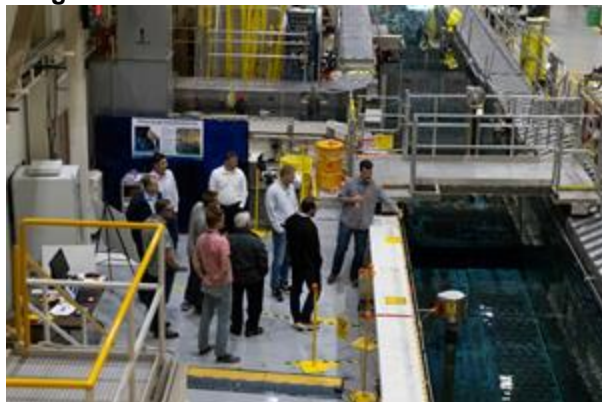


Image 2: Several members of Lightbridge team looking over the ATR canal (May 6, 2026)

Image 3



Image 3: A capsule with an irradiated Lightbridge coupon sample inside after removal from the ATR (May 6, 2026)

Image 4



Image 4: Lightbridge team in front of the ATR facility (May 6, 2026)
Source: Lightbridge Corporation