

MODERATOR: Thank you for standing by and welcome to the Lightbridge Corporation business update in fiscal year 2025 conference call. Please note that today's call is being recorded. It is now my pleasure to introduce Matthew Abenante, Director of Investor Relations for Lightbridge Corporation.

MATTHEW ABENANTE: Thank you, Carmen, and thanks to all of you for joining us today. Our earnings press release was distributed yesterday and is available on the Investor Relations page of the Lightbridge website at www.ltbridge.com. Joining us on the call today is Seth Grae, Chief Executive Officer, along with Andrey Mushakov, Executive Vice President for Nuclear Operations, Scott Holcombe, Vice President of Engineering, and Larry Goldman, Chief Financial Officer.

I want to remind our listeners that any statements on this call that are not historical facts are forward-looking statements. Today's presentation includes forward-looking statements about the company's competitive position and product and service offerings. During today's call, words such as expect, anticipate, believe, and intend will be used in our discussion of future goals and events.

This presentation is based on current expectations and involve certain risks and uncertainties that may cause actual results to differ significantly from such estimates. 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 a result of new developments or otherwise. And with that, I would like to turn the call over to our first speaker, Seth Grae, Chief Executive Officer of Lightbridge Hello, Seth.

SETH GRAE: Hi, Matt, and thank you all for joining us to discuss Lightbridge's business. Update 2025 was a transformative formative year for Lightbridge. I believe will be remembered as the year the company shifted into high gear on execution across multiple critical fronts. We achieved major fuel development milestones while strengthening our balance sheet and advancing key strategic partnerships that positioned us well to successfully commercialize our advanced nuclear fuel.

In a major achievement, we began irradiation testing of enriched uranium-zirconium alloy fuel material samples. After years of meticulous design, engineering, and manufacturing to meet the necessary nuclear quality assurance standards, these samples are now being irradiated in the advanced test reactor at Idaho National Laboratory.

This test program is a pivotal step in demonstrating Lightbridge fuel's uranium-zirconium alloy material performance, generating data to help us validate key thermo-mechanical properties of our target fuel alloy. In 2025, we signed a memorandum of understanding and made a subsequent joint announcement with Oklo Inc to explore potential collaboration opportunities, including on used fuel recycling and reprocessing.

I'll have more to say about the broader nuclear energy landscape and Lightbridge's position within it later in the call. But first, let me turn it over to Andrey Mushakov, Executive VP for Nuclear Operations, to walk you through the significant technical accomplishments we've achieved in 2025. Andrey.

**ANDREY
MUSHAKOV:**

Thank you, Seth. As Seth outlined, in 2025, we made measurable progress across several fronts in the development of Lightbridge fuel. In November, we reached a major fuel development milestone involving the insertion of enriched uranium-zirconium alloy material samples and the start of capsule radiation testing in the advanced test reactor.

These samples are now undergoing irradiation testing to generate critical burnup dependent data we need to support our computer modeling of fuel behavior and regulatory licensing efforts. Scott will provide additional details on several key accomplishments leading up to this pivotal milestone.

In addition to our ongoing irradiation testing project, we have recently significantly expanded our scope of work at Idaho National Laboratory, adding several new projects, including, first, review of our fuel qualification plan, number two, RELAP5-3D code development work for Lightbridge fuel, three, bison code development work for Lightbridge fuel, and four, post-irradiation examination of Lightbridge fuel material coupon samples.

Beyond our work at Idaho National Laboratory, over the past several months, we have significantly beefed up our in-house fuel development team across multiple disciplines, including neutronics, thermal hydraulics and safety analysis, fuel performance, mechanical engineering, materials regulatory licensing, and program management. This expanded in-house team will support the next phase of our fuel development efforts and our planned regulatory engagement with the Nuclear Regulatory Commission that we expect to begin this year.

Next, in July of last year, we presented three technical papers at the Top Fuel 2025 Conference organized by the American Nuclear Society, demonstrating the growing interest in our fuel technology within the nuclear community. Scott will provide additional details on each of the three papers.

Looking ahead, our near-term priorities for the next two to three years include recruitment of additional personnel to support our ongoing and future fuel development activities; continue to radiation testing and post-irradiation examination of coupon samples; refinement of phenomena identification and ranking table analysis and fuel qualification plan;

Start of ongoing engagement with the US Nuclear Regulatory Commission; further development of the coextrusion fabrication process for rodlets and full length rods; site selection and initial deployment planning for the Lightbridge expandable fuel facility; and thermohydraulic modeling and experiments to confirm pressure drop, critical heat flux, and other key parameters. We'll provide updates on these activities as a result of some decisions are finalized. With that, I'll turn the call over to Scott. Scott.

**SCOTT
HOLCOMBE:**

Thank you, Andrey. As Andrey mentioned, in November of last year, we began irradiation testing of our fuel material coupon samples in the advanced test reactor, which is a major technical milestone on our critical path. I'll summarize some of the key accomplishments we've achieved in 2025 leading up to that important milestone.

In June, we completed the final design review for our irradiation experiment at Idaho National Laboratory's advanced test reactor, or ACR. This was a rigorous, multidisciplinary review in which our neutronics, thermal hydraulics, and mechanical design parameters were independently approved by subject matter experts at Idaho National Laboratory. Completing this review was a critical step that cleared the path for us to proceed to fabrication and irradiation testing of the samples.

Also in June, we announced our use of the fission-accelerated steady-state test method, or FAST method. This approach uses higher enriched uranium, in the range of 26% to 30%, within the test specimens to accelerate the rate of fission and thereby compress our testing timeline relative to conventional irradiation methods. The FAST method allows us to reach target burnup levels more efficiently, which is essential for generating the performance data needed for NRC licensing in a commercially relevant time frame.

In July, we achieved a major fabrication milestone, the successful production of enriched uranium-zirconium alloy coupon samples. These samples were produced using our proprietary co-extrusion process, which is the same process we envision using at commercial scale.

By October, capsules containing our uranium-zirconium alloy material samples were loaded into the experiment assembly that was subsequently inserted into the ATR test reactor. Then in November, actual irradiation testing commenced in the ATR. We expect the initial batch of partially irradiated samples to be discharged from the ATR in the April-May time frame, with post-irradiation examination expected to begin later this year. The post-irradiation examination will evaluate structural integrity, dimensional stability, fission gas behavior, thermal conductivity, and overall performance of the fuel samples.

As Andrey mentioned, Lightbridge presented three technical papers at the Top Fuel 2025 Conference that was held in Nashville, Tennessee in October 2025. The first paper showed that Lightbridge metallic fuel design remains well within safe temperature limits after a simulated locked rotor accident, strengthening the safety case needed for future regulatory approval.

The second paper supported this by comparing Lightbridge fuel material to conventional UO₂ and an internationally recognized OECD NEA transient simulation. This showed significantly larger safety margins, translating into greater operational flexibility and improved plant economics for utilities.

The third study dealt with modeling of the fabrication process, and it showed that Lightbridge's patented co-extrusion fabrication process could be accurately modeled using genuine experimental data from the Idaho National Laboratory. These results will be used to verify fabrication models, which will in turn be used to optimize aspects of Lightbridge fuel extrusion.

Taken together, the three papers contribute to building a compelling case across the key stakeholder groups, regulators, production partners, and utility customers. While significant work remains around fuel performance testing and regulatory qualification, each milestone reduces risk and reinforces confidence in Lightbridge's development path. I will now turn the call over to Larry Goldman, Chief Financial Officer, for a summary of the company's financial results. Larry.

**LARRY
GOLDMAN:**

Thank you, Scott, and good afternoon, everyone. I'd like to remind listeners that our detailed financial results are included in our earnings release issued yesterday after market close and in our Form 10-K that will be filed with the Securities and Exchange Commission later today.

Those materials are available on the investor relations section of the Lightbridge Corporation website and on the US Securities and Exchange Commission's website. I encourage everyone to review those documents for full discussion of our financial statements, risk factors, and related disclosures.

As of December 31, 2025, we held approximately \$201.9 million in cash and cash equivalents, compared to \$40 million a year earlier. This positions us with substantial financial resources sufficient to support our operations for an extended period well beyond the near term.

Looking at our cash flows for fiscal 2025, we used approximately \$14.3 million in operations, reflecting the continued investment in our fuel development program and expanded team. On the financing side, we raised \$176 million in net proceeds through our after-market equity offering program. We also generated approximately \$3.6 million in interest income from our deployment of cash in US Treasury bills and cash in our bank savings account, up from \$1.3 million of interest income in the prior year.

We continue to evaluate funding opportunities to support our long-term fuel development activities. These include potential strategic partnerships, government grants and contracts, and as appropriate, additional capital market transactions. We believe the current policy environment, including the DOE's Loan Programs Office prioritization of nuclear projects under the recent executive orders, could create meaningful opportunities for non-dilutive funding sources as our program advances.

Our capital allocation strategy remains disciplined and milestone-driven. We direct resources toward the activities that advance our fuel toward licensing and commercialization, while maintaining a strong balance sheet that gives us the flexibility to pursue opportunities as they arise. Importantly, we continue to maintain a debt-free balance sheet with a clean capital structure that includes no convertible securities or other dilutive debt instruments. Back to you, Seth.

SETH GRAE:

Thank you, Larry. I want to close today by putting our accomplishments and our strategy in the context of what is happening in the nuclear energy industry and more broadly, because I believe the macro environment has become increasingly favorable for Lightbridge.

In May 2025, President Trump signed four executive orders relating to nuclear energy that represent the most significant shift in US nuclear policy in decades. The executive order on reinvigorating the nuclear industrial base directs the Department of Energy to facilitate power upgrades to existing nuclear reactors. Lightbridge fuel is designed to enable significant power upgrades in existing reactors.

The executive orders also direct support for plutonium disposition in reactor fuel, nuclear power for military installations and critical infrastructure, including data centers, and prioritization of nuclear project within the nuclear projects within the DOE's Energy Dominance Financing Office. Each of these policy initiatives creates potential market opportunities for Lightbridge fuel.

The broader market fundamentals for nuclear energy continue to strengthen. Nuclear power generated approximately 18% of US electricity in 2024, making it the single largest source of clean electricity in the country. Globally, there are about 440 operable nuclear power reactors with a combined capacity of just about 400 gigawatts electric, plus 70 reactors currently under construction and more than 120 in advanced planning stages.

What stands out the most is how the demand drivers are coming together. The rapid increase in data center capacity to handle artificial intelligence workloads is making the need for flexible baseload electricity even greater. At the same time, national desires for clean energy and concerns about energy security are strengthening the case for nuclear power.

The US and other countries have pledged to triple global nuclear power capacity by 2050. The US has also pledged to quadruple domestic nuclear power generation by 2050. By the middle of the century, nuclear power might make up more than half of the electricity generated in the United States, up from 18% today.

Within this landscape, Lightbridge occupies a unique position. Our fuel technology addresses the largest segment of the global nuclear market, existing and new build pressurized water reactors. Unlike advanced nuclear companies that are developing innovative new reactors around old nuclear fuel designs, Lightbridge is developing new advanced fuel to be deployed into the existing reactors, providing increased power output and enhanced safety.

Our fuel is also designed for use in new light water reactors, including small modular reactor pressurized water reactors. The ability of Lightbridge fuel to generate more electricity from existing nuclear reactors will be one of the most cost effective ways to increase nuclear capacity.

Our collaboration with Oklo in exploring spent fuel recycling aligns directly with the administration's executive orders on plutonium disposition and reinvigorating the nuclear industrial base. In summary, 2025 was a year of important progress for Lightbridge. We commenced irradiation testing, we raised capital to fund our fuel development program, and we advanced critical strategic partnerships.

The nuclear power industry is experiencing its strongest policy and market support in a generation. And Lightbridge is well-positioned to deliver a fuel technology that meets the industry's growing needs for enhanced power output, improved safety and greater economic efficiency. We look forward to providing further updates as our irradiation testing program progresses and as we advance toward licensing and commercialization.

No questions have been submitted for this call. I want to thank everyone for participating in today's call. We appreciate the continued support of our shareholders and the dedication of our team and partners. We look forward to updating you on our progress in the coming quarters. In the meantime, you can reach us at IRA at ltbridge.com. Stay safe and well. Goodbye.

MODERATOR: That's our conference. Thank you for participating, and you may now disconnect.