

Third Quarter 2025 Earnings and Business Update

AMY: Thank you for standing by and welcome to the Lightbridge Corporation business update and third quarter 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, Amy. And thank you all for joining us today. Our earnings release was distributed yesterday and is available on the Investor Relations page of the Lightbridge website at www.lightbridge.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. Larry Goldman, chief financial officer. And Sherrie Holloway, controller. 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 involves 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. With that, I would like to turn over the call to our first speaker, Seth Grae, chief executive officer Lightbridge. Hello, Seth.

SETH GRAE: Hello, Matt. And thank you all for joining us to discuss Lightbridge's business update for the third quarter and first nine months of 2025. The first nine months of this year have been marked by unprecedented operational milestones and an increasingly favorable political and regulatory environment. We reached several significant milestones on our ongoing project at Idaho National Laboratory, including the coextrusion of an eight foot long rod using depleted uranium-zirconium alloy with nuclear grade zirconium cladding.

We completed the final review of the experiment design in June for our upcoming irradiation testing. We successfully fabricated enriched uranium-zirconium alloy coupon samples that match the exact fuel material composition we intend for our commercial Lightbridge fuel product. Most recently, we successfully loaded capsules containing these enriched samples into an experimental assembly for irradiation testing in the advanced test reactor. Andrey will provide additional details on these milestones.

We are also advancing our collaboration with Oklo, building on our January memorandum of understanding. In October, we announced plans to jointly evaluate additional co-location opportunities for manufacturing advanced fuels from legacy materials, including potential integration of a Lightbridge fuel facility within Oklo grows advanced fuel manufacturing infrastructure. This collaboration is perfectly timed with the executive orders issued by the White House in May that prioritize accelerating US nuclear energy deployment.

Our inclusion in the Russell 2000 and Russell 3000 indexes represents significant recognition of our expanding market presence and provides increased visibility on institutional investors. This milestone reflects our progress and validates our position as a leader in advanced nuclear fuel technology. I'll now turn the call over to Andrey Mushakov, executive VP for nuclear operations, to begin the review of our fuel development activities. Andre?

**ANDREY
MUSHAKOV:**

Thank you, Seth. As Seth outlined, the first nine months of 2025 have been marked by noticeable technical progress across our fuel development program, with the achievement of critical milestones that advanced Lightbridge fuel toward commercial deployment.

In January, we announced a memorandum of understanding with Oklo, encompassing a feasibility study for co-locating our commercial scale, fuel fabrication facility with an Oklo infrastructure to evaluate potential synergies in capital and operating costs. Assessment of reprocessing and recycling opportunities for spent uranium-zirconium fuel, aligning with administration priorities for nuclear efficiencies, and identification of additional mutual interest to accelerate development timeline.

In October, we advanced this partnership by announcing plans to jointly evaluate further co-location opportunities for manufacturing advanced fuels from legacy materials. In February, we successfully demonstrated our proprietary coextrusion process at Idaho National Laboratory, fabricating an eight foot long demonstration rod using depleted uranium-zirconium alloy and nuclear grade zirconium cladding. This validation confirmed our methodology and demonstrated that scalability for full length commercial production.

In June, we completed the final review and approval of our irradiation testing experiment design for the advanced test reactor, culminating an extensive engineering and safety data analysis with independent validation of neutronics, thermal hydraulics, and safety performance to meet rigorous standards. The same month, we fabricated enriched uranium-zirconium alloy equipment samples that match the fuel alloy material composition of our future commercial Lightbridge fuel product, utilizing 26% to 30% enriched uranium to achieve the required heat generation rates.

These enriched samples will undergo irradiation testing using INL's fusion accelerated steady state test of fast method, which utilizes highly enriched uranium to accelerate the burnup accumulation rate, thereby expediting testing timelines. Access to highly enriched uranium for private sector fuel testing is extremely rare, and is only available through government facilities such as the Idaho National Laboratory. This capability enables us to achieve burnup targets more quickly than conventional testing on method, thereby accelerating our data generation timelines.

Since our last earnings call, we have achieved a pivotal new milestone, the successful completion of loading capsules containing Lightbridge fuel material samples comprised of enriched uranium-zirconium alloy recently manufactured at INL into an experiment assembly. The experiment assembly is now ready for the start of irradiation testing and the advanced test reactor, which is expected to begin soon.

Key highlights of this achievement include the completion of loading under stringent quality control and process validation protocols at Idaho National Laboratories materials and fuels complex. The precision manufacturing assembly of these coupon sample, which makes the composition intended for our future commercial Lightbridge fuel product. And the upcoming start of radiation testing of these coupon samples, in accordance with our existing cooperative research and development agreement with Idaho National Laboratory.

The planned irradiation testing program, combined with post-irradiation examination activities to be outlined in the forthcoming project task statement, will yield critical performance data needed to inform our planned regulatory licensing activities and advance our commercial deployment efforts.

In early October, Lightbridge presented three peer reviewed papers at the Top Fuel 2025 conference held in Nashville, Tennessee, highlighting our latest advancements in fuel design and performance modeling. Scott will provide additional details on each of these papers.

Support our accelerating development efforts, we are actively expanding our in-house engineering team. In recent months, we have added key personnel to our engineering group, and we will intensify recruitment over the coming months to attract top nuclear engineering talent across additional disciplines.

In summary, these milestones represent a significant accomplishment in our fuel field development program as we ramp up our efforts in anticipation of regulatory engagement with the US Nuclear Regulatory Commission in the near future. I'll ask Scott Holcombe, our vice president of engineering, to provide a recap of Top Fuel 2025. Scott?

**SCOTT
HOLCOMBE:**

Thank you Andrey. As Andrey mentioned, Lightbridge presented three peer reviewed papers at the American nuclear society's Top Fuel 2025 conference, one of the premier gatherings for the global nuclear fuel community. Our papers were met with significant interest.

I would like to briefly summarize their implications for Lightbridge and our current development path. Let's first start with the first paper, which addresses the performance of Lightbridge fuel material in one of the most challenging accident scenarios. The key takeaway is that we're building a solid safety case that will be critical for regulatory approval and customer adoption.

The paper, Conceptual Assessment of Lightbridge Fuel post-CHF Performance, Demonstrates that Lightbridge fuel's unique metallic design provides exceptional performance during a simulated locked rotor event in a pressurized water reactor. In simple terms, our fuel remains well within safe temperature limits, even when the cooling is drastically reduced. For our future customers, the utilities, this translates directly into enhanced safety, which can lead to significant economic benefits through power upgrades and longer fuel cycles.

Our second paper, Lightbridge Fuel Fabrication, Modeling and Abacus with Experimental Comparisons, covers manufacturing and confirms our ability to accurately model a key fabrication step. We have successfully modeled our proprietary co-extrusion manufacturing process and validated those simulations against real world experimental data from our work at Idaho National Laboratory. This can significantly de-risk our future supply chain and provide high confidence in our ability to transition to cost effective, high volume manufacturing, enabling the reliable and economic production of Lightbridge fuel.

Our third paper provides a comparison of our fuel material against the current industry standard. This paper, Development of a Method for Comparison of Lightbridge's Advanced Fuel Material Against Conventional UO₂ Fuel Performance, is a validation of our fuel superior performance.

Using the internationally recognized OECD/NEA Three Mile Island Main Steam-Line Break Transient Benchmark, we demonstrated that Lightbridge fuel material offers significantly larger safety margins than conventional fuel. As with the first paper, the results in this simulation show that Lightbridge fuel material is expected to enhance safety, which translates to improved operational flexibility and plant economics.

These three papers, taken together, build a compelling case for our fuel's value at every stage by demonstrating its safety case to regulators, its manufacturability to our production partners, and its economic benefits to our future customers. While significant work remains, particularly in fuel performance testing and regulatory qualification, each of these milestones reduces risk and clarifies our path forward. The progress detailed in these papers reinforces our confidence in our technology and our team's ability to achieve our long term goals with that, I'll turn the call back over to Seth.

SETH GRAE:

Thank you Scott. The political and industrial landscape has become remarkably supportive of advancing nuclear energy, with several landmark developments underscoring the sector's accelerating momentum. President Trump's nuclear energy executive orders in May, represented the most significant policy shift toward nuclear energy in decades. Building on this foundation, the US government recently inked an \$80 billion partnership with Westinghouse Electric, Cameco and Brookfield Asset Management to construct new nuclear reactors, signaling a bold commitment to domestic nuclear resurgence.

Complementing this, a landmark US-Japan agreement signed on October 28, advances cooperation on next generation reactors, enhancing energy security and export opportunities while reducing reliance on dominant foreign suppliers.

Additionally, the US Army's announcement of the Janus program on October 14, establishes a framework for deploying resilient next generation nuclear power at military installations by 2028, further integrating advanced nuclear fuel technologies into national defense strategies.

The directive to prioritize power upgrades for existing reactors aligns with Lightbridge fuel's capabilities. We believe our fuel can enable power uprates up to 17% in existing reactors, and we are confident that no other nuclear fuel technology can come close to that capability. This direct policy support, coupled with these recent initiatives, validates our value proposition and creates substantial market opportunities.

The executive orders also emphasize, maximizing nuclear fuel efficiency through recycling and reprocessing, and they establish funding priorities that favor companies with demonstrated technological maturity and near-term deployment potential. We believe Lightbridge is well positioned to benefit from these policy initiatives, particularly given our partnership with national universities and the broader industry's surge.

The global momentum behind nuclear energy continues to accelerate at an unprecedented pace. Major technology companies are increasingly turning to nuclear power to meet the immense energy demands of data centers and AI infrastructure, as seen in next era energy's recent agreement with Google to restart the Duane Arnold energy center in Iowa. This agreement will power Google's data centers, creating new market segments beyond traditional utility customers.

The commitment by over 20 countries at COP28 to triple nuclear globally by 2050 is being translated into concrete policy actions worldwide today, including a projected surge of gigawatts in new capacity driven by restarts in Japan, increased outputs in France and the activation of new plants in India, South Korea and Europe. We're seeing robust support for existing reactor operating license extensions, new large scale plant deployment, and accelerated development of small modular reactors. This creates multiple pathways for Lightbridge fuel deployment across various reactor types and applications.

We believe our collaboration with Idaho National Laboratory represents a valuable public private partnership. The recent completion of loading the coupon samples into an experiment assembly, coupled with the upcoming irradiation testing program and post-irradiation examination activities, is expected to generate the critical performance data needed to support our regulatory licensing efforts at the Nuclear Regulatory Commission.

We expect this data to contribute to streamlined licensing under-- to streamline licensing and to assist utilities in their analysis of Lightbridge fuel for commercial deployment. We believe the convergence of supportive government policies, unprecedented industry demand, and our ongoing fuel development progress creates a favorable environment for Lightbridge. We are strategically positioned at the forefront of fuel innovation, developing a technology designed to meet the evolving demands of the global energy landscape.

Our team remains focused on executing our development plan, advancing our technology through rigorous testing and demonstration, and building the strategic partnerships necessary for successful commercialization. We believe Lightbridge fuel will be instrumental in maximizing the potential of both the existing nuclear fleet and next generation water cooled reactors-- contributing meaningfully to global energy security and the clean energy transition. I'll now turn the call over to Larry Goldman, chief financial officer, for a summary of the company's financial results. Over to you, Larry.

**LARRY
GOLDMAN:**

Thank you Seth. And good afternoon, everyone. We will be filing our form 10-Q later today with the SEC. Let me begin by underscoring the strength of our balance sheet as of September 30, 2025. We ended the quarter with a strong liquidity position, including cash and cash equivalents of \$153.3 million, and working capital of approximately \$153.1 million. This provides us with a multi-year cash runway to support our ongoing R&D activities, as well as our operational needs.

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. Additionally, our interest income from investments in US treasuries has become a meaningful offset to our operating expenses.

For the nine months ended September 30, 2025, we generated \$2.1 million in interest income, up from \$1 million for the same period last year, reflecting the interest earned on our higher average cash balances. This strong financial position provides us with the flexibility to pursue government cost sharing programs, such as those offered through the Department of Energy, and to explore strategic partnerships with industry players. We are well positioned to capitalize on growth opportunities as the nuclear sector continues to expand, driven by the increasing demand for clean energy and federal support for advanced nuclear fuels.

Now, turning to our cash flow analysis for the nine months ended September 30, 2025. Net cash used in operating activities increased to \$8.1 million from \$5.7 million in the prior period. This change was primarily due to higher spending on R&D, which rose by 2.1 million to \$5.3 million, reflecting our activities at INL, and increased employee compensation related to our R&D activities. DNA expenses also contributed to the increase, up 3.5 million to \$9.2 million, driven primarily by higher professional fees, consulting, employee compensation, and stock-based compensation.

On the financing side, we generated \$121.4 million in net cash, a substantial increase from the 3.7 million we generated last year. This was driven by \$120.4 million in net proceeds from the issuance of approximately 9.9 million shares of common stock under our ATM facility, along with 1.2 million of proceeds from stock option exercises, partially offset by \$0.2 million of cash spent for tax withholding on vested equity awards.

Overall, these activities resulted in a net increase in cash and cash equivalents of \$113.3 million for the nine months ended September 30, 2025. In summary, our balance sheet positions us very well to execute on our strategic priorities and drive long-term value for our shareholders. I will now turn the call over to Sherrie Holloway, our controller, who will go over our P&L financial information for the third quarter. Sherrie?

SHERRIE

HOLLOWAY:

Thank you Larry. Net loss was \$12.4 million for the nine months ended September 30, 2025, compared to \$7.9 million for the nine months ended September 30, 2024. Total R&D expenses amounted to 5.3 million for the nine months ended September 30, 2025, compared to 3.2 million for the nine months ended September 30, 2024, an increase of \$2.1 million.

This increase primarily consisted of higher Idaho National Laboratory project labor costs, allocated employee compensation, and stock-based compensation expenses, offset by a decrease in expenses related to the Romania Feasibility Study and Centrist Energy Feed Study, both studies completed in 2024.

Total G&A expenses were 9.2 million for the nine months ended September 30, 2025, compared to 5.7 million for the nine months ended September 30, 2024. The increase of 3.5 million was primarily due to increases in professional fees, consulting fees, employee compensation, and stock-based compensation.

Total other income was 2.1 million for the nine months ended September 30, 2025, compared to 1 million for the nine months ended September 30, 2024. Other income consisted of interest income earned from treasury bills and our bank savings account. Back to you Seth.

SETH GRAE:

Thank you Sherrie. 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, could reach us at irlthelightbridge.com. Stay safe and well. Goodbye.

AMY:

The conference is now concluded. Thank you for attending today's presentation. You may now disconnect.