Lightbridge Second Quarter 2025 Earnings & Business Update Conference Call

SHANNON:

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

MATTHEW ABENANTE:

Thank you, Shannon, and thanks to all of you for joining us today. Our earnings press release was distributed yesterday and can be viewed on the Investor Relations page of the Lightbridge website at www.ltbridge.com.

Joining us on the call today is Seth gray, Chief Executive Officer, along with Andry Mushakov, Executive Vice President for Nuclear Operations. Scott Holcomb, Vice President of Engineering, Larry Goldman, Chief Financial Officer, and Sherri 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 a discussion of goals or events in the future.

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.

And with that, I would like to turn the call over to our first speaker, Seth Gray, Chief Executive Officer of Lethbridge. Hello, Seth.

SETH GRAY:

Hello, Matt. And thank you all for joining us to discuss light bridges business update for the second quarter and first half of 2025. the first six months of this year have been marked by unprecedented operational milestones and an increasingly favorable political and regulatory environment, that we believe may facilitate the development of our advanced nuclear fuel designs.

We achieved several significant milestones on our ongoing project at Idaho National Laboratory, including one, co-extrusion of an 8-foot long rod using depleted uranium zirconium alloy with nuclear grade zirconium cladding. Two, completion of the final review of the experiment design in June for our upcoming irradiation testing. And three, successful fabrication of enriched uranium zirconium alloy coupon samples that match the exact fuel material composition we intend for our commercial Lightbridge Fuel product.

Andrey will provide additional details on each of these milestones. We also entered into a memorandum of understanding with Oklo in January to explore the co-location of commercial fuel fabrication facilities and co-location on advanced fuel recycling in collaboration on advanced fuel recycling.

Yesterday, we announced an update. We now plan to jointly evaluate the potential co-location of a Lightbridge Fuel fabrication facility within Oklo's newly announced advanced fuel manufacturing facility, in addition to Oklo's previously announced separate commercial fuel fabrication facility. 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 presents important recognition of our growing market presence and provides enhanced visibility among institutional investors. This milestone reflects our progress and validates our position as a leader in advanced nuclear fuel technology.

Now, I'll turn the call over to Andrey Mushakov, Executive VP for Nuclear Operations, to begin the review of our fuel development activities. Andrey?

ANDREY MUSHAKOV:

Thank you. As Seth outlined, the first half of 2025 has been marked by exceptional technical progress across multiple fronts of our fuel development program. We have achieved critical milestones that advance our path toward commercial deployment of Lightbridge Fuel.

In January, we announced our collaboration with Oklo through a memorandum of understanding. This collaboration encompasses 3 key areas. First, conducting a feasibility study for co-locating on our commercial scale fuel fabrication facility with an Oklo's plant fuel fabrication infrastructure, which could offer potential synergies in capital expenditures and operating costs.

Second, exploring opportunities for collaboration on reprocessing and recycling of spent uranium zirconium fuel, which aligns with the administration's emphasis on maximizing nuclear fuel efficiency. And third, identifying additional areas of mutual interest that could accelerate both companies development timelines.

In February, we successfully demonstrated our proprietary co-extrusion manufacturing process at Idaho National Laboratory or INL, creating an 8-foot long demonstration rod using depleted uranium zirconium alloy with nuclear-grade zirconium cladding. This achievement provided further validation of our fabrication methodology and confirmed the scalability of our manufacturing fractured approach toward the goal of full-length road fabrication for future commercial production.

Building on that success, we reached a major milestone in June by completing the final review of the experiment design for our upcoming radiation testing program and the advanced test reactor. This final approval from INL represents the culmination of extensive engineering and safety analysis work. The neutronics, thermal hydraulics and safety performance of our experiment have been independently reviewed and approved by INL experts, confirming that our experiment design meets the rigorous standards required for testing and advanced test reactor.

Most significantly, we have successfully fabricated enriched uranium zirconium alloy coupon samples that match the exact fuel material composition intended for our commercial average fuel product. These samples utilize enriched uranium in the 26% to 30% range, specifically, selected to achieve the required linear heat generation rates for our designated core position within the advanced test reactor. This represents a significant advancement from our previous work with depleted uranium, bringing us one step closer to generating the critical irradiation performance data needed for regulatory licensing.

These enriched samples will undergo irradiation testing using Idaho National Laboratory's groundbreaking fusion accelerated steady state test method, or FAST method, which utilizes highly enriched uranium to accelerate the burnup accumulation rate that can expedite tests and timelines. Access to highly enriched uranium for private sector fuel, testing is extremely rare and is only available through government facilities, such as the INL.

This capability enables us to achieve burnup up target more quickly than conventional testing methods, thereby reducing significantly accelerating our data generation timeline.

Now, I'll ask Scott Holcomb, our Vice President of Engineering, to discuss our development roadmap. Scott?

SCOTT HOLCOMB:

Thank you. Andrey. Looking ahead to the next phase of our development program, we've outlined several key milestones over approximately the next 2 to 3 years. We will continue executing our strategic partnership project agreement and cooperative research and development agreement work at INL, leading to the insertion of our enriched samples for irradiation testing in the advanced test reactor.

Concurrently, we will continue to develop and demonstrate our fabrication process for co-extruded multi-lobed Lightbridge Fuel, and we're advancing our modeling and simulation capabilities to accurately predict Lightbridge Fuel performance across the full domain of operating conditions for which our fuel will be licensed.

To support these and other activities, we're in the process of hiring additional nuclear engineering personnel to expand our in-house fuel development team. We're also developing our comprehensive fuel qualification plan, which will describe our approach to characterizing and validating the performance of our fuel rods, assemblies, and assembly components across relevant operating scenarios. This plan will support our Nuclear Regulatory Commission engagement plan, which will outline how and when we engage the NRC, regarding submission of information and supporting documentation for license applications.

On the fabrication front, we're continuing to develop and demonstrate our manufacturing process for coextruded, cladded rodlets, and other fuel components. Importantly, we plan to complete site selection and begin deployment of our Lightbridge Fuel fabrication facility, which will have capacity to produce fuel samples, coupons, rodlets, and full-length fuel rods for lead test rods and lead test assemblies with the possibility of scaling it up to manufacturing batch reload quantities of Lightbridge Fuel rods for future commercial use.

We will also be performing thermal hydraulic modeling and experiments to confirm pressure drop, critical heat flux performance, and other thermal hydraulic parameters of Lightbridge Fuel under various operating conditions in different reactor types. The progress we've achieved in the first half of 2025 positioned us exceptionally well to execute this development roadmap and advance toward commercial deployment of Lightbridge Fuel.

With that, I'll turn the call back over to Seth.

SETH GRAY:

Thank you, Scott. The political landscape has become remarkably supportive of advancing nuclear energy. President Trump's nuclear energy executive orders in May represent the most significant policy shift toward nuclear energy in decades. The directive to prioritize power uprates for existing reactors aligned perfectly with Lightbridge Fuel's capabilities. We believe our technology can enable power uprates of up to 17% in existing reactors. And we believe there is no other fuel technology that could match that capability.

While we may not meet the administration's goal of adding 5 gigawatts through power uprates by 2030, this direct policy support 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 laboratories. The global momentum behind nuclear energy continues to accelerate at an unprecedented pace. We are witnessing a fundamental paradigm shift driven by the intersection of artificial intelligence power demands, energy security imperatives, and clean energy commitments. Major technology companies are increasingly turning to nuclear power to meet the immense energy demands of data centers and Al infrastructure, creating new market segments beyond traditional utility customers.

The commitment by over 20 countries at COP28 to triple global nuclear capacity by 2050 is being translated into concrete policy actions worldwide. 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.

The focus on small modular reactors continues to intensify globally, with these designs offering greater flexibility, faster deployment, and suitability for diverse applications, including industrial sites and remote communities. We believe Lightbridge Fuel is well suited for water cooled SMR designs, offering safety and efficiency benefits that can significantly enhance their value propositions and enable load following capabilities with renewable energy sources.

We believe our collaboration with Idaho National Laboratory represents one of the most important public-private partnerships in advanced nuclear fuel development. The coming irradiation testing—the upcoming irradiation testing program, coupled with post irradiation examination activities, is expected to generate the critical performance data to support our regulatory licensing efforts through the Nuclear Regulatory Commission. We expect this data to contribute to streamlined licensing under the Advance Act, 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 and 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. Larry?

LARRY GOLDMAN:

Thank you, Seth. And good afternoon, everyone. I am happy to report that our financial position has significantly strengthened. Our cash and cash equivalents totaled \$97.9 million at the end of the second quarter, compared to \$40 million at the end of 2024.

Our working capital was \$97.2 million at June 30, 2025, compared to \$39.9 million at December 31, 2024. This is very important to Lightbridge and our stockholders, as well as our external stakeholders, such as the federal government, to ensure we have sufficient working capital, as well as the ability to access capital in the future in order to conduct the R&D activities.

For further information regarding our second quarter 2025 financial results and disclosure, please refer to our earnings release that we issued yesterday and our quarterly report on Form 10-Q, which will be filed with the Securities and Exchange Commission later today. I will now turn the call over to Sherri Holloway, our controller, who will go over our P&L personal financial information for the second quarter. Sherri?

SHERRI HOLLOWAY:

Thank you. Larry. Net loss was \$3.5 million for the second quarter ended June 30, 2025, compared to \$2.4 million for the second quarter ended June 30, 2024.

Total R&D expenses amounted to \$1.6 million for the second quarter ended June 30, 2025, compared to \$2.9 million for the second quarter ended June 30, 2024, an increase of \$0.7 million. This increase was due to the increase in R&D activities related to the development of Lightbridge Fuel. This increase primarily consisted of an increase in INL project labor costs of \$0.5 million, an increase in allocated employee compensation and employee benefits and stock-based compensation expenses of \$0.1 million, and an increase of other R&D expenses of \$0.2 million, offset by decrease in the Romania feasibility study of \$0.1 million.

Total G&A expenses were \$2.5 million for the second quarter ended June 30, 2025, compared to \$1.8 million for the second quarter ended June 30, 2024. The increase of \$0.7 million was primarily due to an increase in IT services fees of \$0.1 million, an increase in subscription expense of \$0.1 million, an increase in professional fees of \$0.3 million, and an increase in stock-based compensation of \$0.2 million.

Total other income was \$0.6 million for the second quarter ended June 30, 2025, compared to \$0.3 million for the second quarter ended June 30, 2024. Other income consisted of interest income earned from the purchase of Treasury Bills and our bank savings account. Back to you, Seth.

SETH GRAY:

Thank you, Sherri. No questions have been submitted for this call. I want to thank everybody 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, we can be reached at ir@ltbridge.com. Stay safe and well. Goodbye.

SHANNON:

This concludes today's conference. Thank you for your participation. You may now disconnect.