Lightbridge Third Quarter 2024 Earnings & Business Update Conference Call

MODERATOR: Thank you for standing by, and welcome to the Lightbridge Corporation business update in third quarter 2024 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. Please go ahead.

MATTHEW ABENANTE: Well, thank you, and thanks to all of you for joining us today. The company's 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 Grae, Chief Executive Officer, along with Andrei Mushakov, Executive Vice President for Nuclear Operations. Scott Holcombe, Vice President of Engineering. Larry Goldman, Chief Financial Officer. And Shari Holloway, Controller.

I would like 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 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'd like to turn the call over to our first speaker, Seth Grae, Chief Executive Officer of Lightbridge. Hello, Seth.

SETH GRAE: Thank you, Matt. And thank you all for joining us to discuss Lightbridge's third quarter 2024 results. At Lightbridge, we are advancing nuclear fuel technology that is set to address critical challenges facing the nuclear industry. Our focus has always been on making nuclear energy safer, more efficient, and more cost-effective than existing fuel. We are designing Lightbridge fuel to deliver superior performance in existing reactors and next generation water cooled reactors, including small modular reactors.

We are developing the fuel to offer several key advantages over traditional fuel. First, it may be able to increase power output by 10% to 17% in existing pressurized water reactors, PWRs, and up to 30% in new-built PWRs. Utilities could produce more energy from the same reactors, extending the lifespan of those plants and maximizing their value.

Second, Lightbridge fuel is expected to operate at 1000 degrees Celsius cooler than existing fuels. This is a crucial safety enhancement. A cooler operating temperature means the fuel is more stable and reduces the risk of overheating in normal operation or design-basis accidents. But safety and efficiency aren't the only benefits. A different concept of metallic fuel technology could be designed to help reduce global stockpiles of plutonium. The ability to incorporate plutonium in metallic fuel could contribute to both energy production and nuclear non-proliferation efforts.

In addition to our focus on fueling existing nuclear power plants, we are also positioning light bridge fuel to potentially power the small modular reactors of the future. The US Department of Energy is funding two separate studies at MIT and at Texas A&M University to evaluate the use of our fuel in small modular reactors, particularly, the NuScale Voyager design.

Small modular reactors can play a significant role in the future energy mix, providing scalable, safe, and flexible power solutions for utilities and industries. Looking ahead, we remain focused on executing our strategy, completing the fuel development process, achieving regulatory approvals, and establishing commercial arrangements with utilities and other key players in the energy sector to generate revenue from our fuel technology. We believe the opportunity for Lightbridge is immense.

As nuclear fuel is poised to reclaim its place as a cornerstone of global energy supply, we believe Lightbridge fuel will be integral to making nuclear energy safer, more efficient, and more sustainable. 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 Seth. Over the past few months, we have continued to make progress on our fabrication process demonstration efforts at Idaho National Laboratory, or INL. After achieving a critical milestone of extruding and unclad cylindrical rod sample of Lightbridge fuel material consisting of an alloy of depleted uranium and zirconium in March of this year, we have subsequently completed another extrusion with depleted uranium and zirconium alloy using adjusted extrusion parameters.

Over the next year, we plan to continue this fabrication process demonstration work, and conduct a series of additional extrusions with depleted uranium and zirconium alloy before proceeding to extrusions of samples with enriched uranium and zirconium alloy for irradiation testing and a test reactor environment. In addition to our ongoing project at INL, we are working with Raten ICN on an engineering study to assess the compatibility and suitability of Lightbridge fuel for use in candu reactors. Scott will provide additional details on this project.

Finally, in October of this year, Lightbridge presented a technical paper at the Top Fuel 2024 conference in Grenoble, France, providing an overview of some of the company's previous fuel development activities. There were two other independent technical studies about Lightbridge fuel presented at the technical conference. One was produced by Massachusetts Institute of Technology, or MIT, and the other one by Structural Integrity Associates, or SIA.

The MIT study, supported by US Department of Energy Nuclear Energy University Programs Grant, simulated the performance of Lightbridge fuel and NuScale's Voyager small modular reactor. This SIA study, conducted under a DOE gain regulatory research grant, evaluated Lightbridge fuel in a pressurized water reactor, PWR, under both normal and accident conditions.

These US government-funded studies further validate the enhanced safety and performance of Lightbridge fuel, particularly its improved performance under extreme conditions. Now I'll ask Scott Holcombe, our Vice President of Engineering, to give us additional details on some of these ongoing projects and initiatives. Scott?

SCOTT HOLCOMBE: Thank you, Andrey. The Raten ICN Nuclear Research Institute in Romania has been conducting an engineering study to assess the initial feasibility of using Lightbridge fuel in candu reactors. The results so far indicate that using our fuel with enrichment below 5% uranium-235 can provide double the discharge burnup of current candu fuel. The initial engineering study is expected to be completed this year. And we expect to perform additional evaluations of Lightbridge fuel for use in candu reactors in 2025 and future years.

As Andrey mentioned, during the Top Fuel 2024 conference recently held in Grenoble, France, three papers on Lightbridge fuel were presented. Lightbridge paper gave an overview of some of the company's previous fuel development activities, including results from an experimental test previously conducted in an overseas test reactor.

In this test, a Lightbridge metallic fuel rodlet endured approximately 24 hours in dry out conditions during irradiation and still maintained its structural integrity and cooling geometry. Two other papers presented independent studies conducted by MIT and SIA, and comprised simulations of Lightbridge fuel and a NuScale SMR and a PWR, respectively.

According to the MIT study, the main advantages of Lightbridge over conventional fuel are Lightbridge fuels, increased heat transfer area, lower operating temperature, a higher margin to critical heat flux, or CHF. The cell spacing design reduced irradiation induced swelling and lower potential for formation of crud on the fuel rod cladding.

According to the study performed by SIA, Lightbridge fuel demonstrates several advantages over conventional fuel and accident conditions. These advantages include lower peak cladding temperature, shorter duration at high temperatures, reduced cladding oxidation, cladding stresses insufficient to damage the cladding, and enhanced safety margins. These studies have confirmed the expected performance of Lightbridge fuel and provide a basis for continued development and future regulatory licensing efforts. With that, I'll turn the call back over to Seth.

SETH GRAE: Well, thank you, Scott. Nuclear power is no longer just an option. There is a growing recognition that nuclear power should play an essential role for meeting the world's growing power demands. There have been recent developments in major industries, particularly, those in the technology sector, that are driving unprecedented demand for energy. AI, in particular, is fueling this surge. Data centers are becoming some of the largest energy consumers in the world.

To give you an example, some AI data center complexes are being planned that could consume nearly as much electricity as a city the size of New York. This demand requires a stable, round-the-clock power source that can scale sustainably and remain carbon free. Nuclear energy, particularly, next generation nuclear technologies, could play an important role.

In the past few months, we've seen tech giants like Amazon, Google, and Microsoft make landmark investments in nuclear power, including in the development of small modular reactors. For these tech companies, the goal is clear-- they need massive, uninterrupted power supplies to sustain AI workloads, and nuclear energy is a promising option for meeting those needs in the future. Renewables alone can't meet this demand because they are intermittent. Nuclear provides the reliable, clean, and effective power required for these massive projects.

This resurgence in nuclear power isn't just happening in the United States. In recent global forums such as the United Nations COP28 in Dubai last year, nuclear energy took center stage as a critical solution to the climate crisis. Many nations, including the United States, pledged to triple global nuclear capacity by 2050. These pledges signal a clear recognition that nuclear is essential for reaching net zero emissions, and meeting the goals of the Paris Agreement.

Lightbridge is active in international meetings. Scott mentioned his recent paper and presentation at the Top Fuel conference in France. I'm in London today for meetings, and we'll go from here to Geneva for the World Economic Forum's Advanced Energy Solutions CEO meeting. And from there to Baku for COP29.

We believe Lightbridge is well positioned to support reactors currently in operation and future large and small water cooled reactors by providing the next generation nuclear fuel solution to make those reactors more efficient. I'll now turn the call over to Larry Goldman, Chief Financial Officer, to summarize the company's financial results. Larry?

LARRY GOLDMAN: Thank you, Seth. And good morning, everyone. For further information regarding our third quarter 2024 financial results and disclosures, please refer to our earnings release that we filed yesterday, as well as our quarterly report on Form 10-q that we will file later today with the Securities and Exchange Commission.

The company's working capital position was $25.9 million at September 30, 2024, versus $28.3 million at December 31, 2023. Total assets were $27.6 million and total liabilities were $1.2 million at September 30, 2024. Today, we have ample working capital and financial flexibility to support our near-term fuel development expenditures.

This is very important to Lightbridge and our stockholders-- as well as our external stakeholders, such as the federal government-- to ensure that we have sufficient working capital, as well as the ability to access capital in the future to conduct our R&D activities. Total cash and cash equivalents were $26.6 million, as compared to $28.6 million at December 31, 2023-- a decrease of $2 million for the first nine months ended September 30, 2024.

Total cash used in operating activities for the nine months ended September 30, 2024 was $5.7 million, an increase of $1.5 million compared to the $4.2 million for the nine months ended September 30, 2023. This increase was primarily due to increased spending on R&D, D&A expenses, and changes in working capital.

Total cash provided by financing activities for the nine months ended September 30, 2024 was $3.7 million, a decrease of $0.8 million compared to the $4.5 million in the nine months ended September 30, 2023. This decrease was due to a decrease in net proceeds from the issuance of common stock by at the market, or ATM facility.

We anticipate that our long-term fuel development and commercialization timeline will remain generally consistent with what we have disclosed in our SEC filings. In support of our long-term business and future financing requirements with respect to our fuel development, we expect to continue to seek government funding in the future, along with new strategic alliances that may contain cost-sharing contributions and additional funding from others to help fund our R&D activities, leading to the commercialization of Lightbridge fuel.

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 of 2024. Sherrie?

SHERRIE HOLLOWAY: Thank you, Larry. net loss was $2.7 million for the third quarter ended September 30, 2024, compared to $1.8 million for the third quarter ended September 30, 2023. Total R&D expenses amounted to $1.3 million for the three months ended September 30, 2024, compared to $0.5 million for the three months ending September 30, 2023, an increase of $0.8 million.

This increase primarily consisted of an increase in INL project labor costs and outside R&D expenses of $0.2 million, an increase in centrist energy feed study of $0.1 million, an increase in allocated employee compensation, and employee benefits of $0.3 million due to an increase in R&D employees. An increase in consulting fees of $0.1 million, and an increase in int expenses of $0.1 million.

Total G&A expenses amounted to $1.7 million for the three months ended September 30, 2024, compared to $1.6 million for the three months ended September 30, 2023. The increase of $0.1 million was primarily due to an increase in employee compensation of $0.1 million and an increase in stock-based compensation of $0.1 million, offset by a decrease in professional fees of $0.1 million.

Total other income was $0.3 million for the three months ended September 30, 2024, unchanged compared to the three months ended September 30, 2023. The company's interest income earned from the purchase of Treasury Bills and from our bank savings account for the three months ended September 30, 2024 was constant as compared to the three months ended September 30, 2023. Back to you Seth.

SETH GRAE: Thank you, Sherrie. I would like to thank everybody for participating on today's call. We've not received questions submitted by email. We're looking forward to providing additional updates. In the meantime, we can be reached at ir@ltbridge.com. Stay safe and well. Goodbye.

MODERATOR: This concludes today's conference call. You may now disconnect.