UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): February 26, 2025

LIGHTBRIDGE CORPORATION

(Exact name of registrant as specified in its charter) Nevada 001-34487 91-1975651 (State or other jurisdiction (Commission (IRS Employer of incorporation) File Number) Identification No.) 11710 Plaza America Drive, Suite 2000 Reston, VA 20190 (Address of principal executive offices, including zip code) (571) 730-1200 (Registrant's Telephone Number, Including Area Code) Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions: П Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a -12) Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d -2(b)) Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e -4(c)) Securities registered pursuant to Section 12(b) of the Act: Title of Each Class: Trading Symbol(s): Name of Each Exchange on Which Registered: Common Stock, \$0.001 par value LTBR The Nasdag Capital Market Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2). Emerging growth company □ If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \square

Item 2.02 Results of Operations and Financial Condition.

On February 26, 2025, Lightbridge Corporation issued a press release relating to its results for the year ended December 31, 2024. A copy of the press release is furnished herewith as Exhibit 99.1.

The information in this Current Report on Form 8-K under Item 2.02, including the accompanying press release, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by reference to such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release dated February 26, 2025
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

LIGHTBRIDGE CORPORATION

Dated: February 26, 2025 By: /s/ Seth Grae

Name: Seth Grae

Title: President and Chief Executive Officer



Lightbridge Provides Business Update and Announces Fiscal Year 2024 Financial Results

RESTON, Va, February 26, 2025 (GLOBE NEWSWIRE) – Lightbridge Corporation ("Lightbridge" or the "Company") (Nasdaq: LTBR), an advanced nuclear fuel technology company, announced its financial results for the fiscal year ended December 31, 2024, and provided an update on the Company's continued progress.

Seth Grae, President & Chief Executive Officer of Lightbridge Corporation, commented, "We believe 2024 was a transformative year for the nuclear industry as we saw unprecedented momentum in the adoption and development of nuclear power solutions. Throughout the year, Lightbridge continued advancing development of our nuclear fuel technology, to deliver more power for a cleaner energy future. Our focus on developing next-generation metallic fuel for water-cooled reactors positions us to address the growing demand for reliable, sustainable nuclear power, from data center operators and other industrial customers seeking clean, reliable power. We are designing Lightbridge FuelTM to offer superior heat transfer capabilities, resulting in lower operating temperatures, as well as enhanced economic and safety benefits that we believe will be crucial for existing large reactors and the emerging small modular reactor market."

"We have continued our ongoing collaboration with the Department of Energy's Idaho National Laboratory. In March 2024, we announced successful casting and extrusion of a demonstration sample consisting of depleted uranium and zirconium alloy, followed by an announcement in February 2025 of successful co-extrusion of a sample consisting of an alloy of depleted uranium and zirconium with an outer cladding made of nuclear-grade zirconium alloy material. In October 2024, MIT presented a technical paper with preliminary safety evaluation results at the TopFuel 2024 Conference in Grenoble, France. According to MIT, the results show promising safety and performance benefits for Lightbridge FuelTM. Compared to conventional fuel, Lightbridge FuelTM demonstrated improved thermal-hydraulic margins, lower operating temperatures, and greater potential for power uprates, which contributes to enhancing reactor economics. A recently completed engineering study conducted by the Institutul de Cercetări Nucleare PiteȘti, a subsidiary of Regia Autonoma Tehnologii pentru Energia Nucleara (RATEN ICN) in Romania indicates that Lightbridge FuelTM can double the discharged burnup in a CANDU reactor at uranium-235 enrichment levels of less than 3%, compared to conventional uranium dioxide fuel. Based on these favorable initial results, we plan to continue further evaluation of Lightbridge FuelTM in CANDU reactors. Most recently, our memorandum of understanding with Oklo marks an important step forward, exploring potential synergies in commercial-scale fuel fabrication facility co-location and advanced fuel recycling technologies."

"Looking ahead, we see significant opportunities as major technology companies and energy producers increasingly recognize nuclear power as a strategic solution for clean, baseload electricity generation. We believe Lightbridge is well-positioned to capitalize on this growing market demand, particularly as our fuel technology can enable power uprates in both existing reactors and new water-cooled SMRs, providing a cost-effective path to increased power generation," concluded Mr. Grae.

Financial Highlights

Working capital was \$39.9 million at December 31, 2024, as compared to \$28.3 million at December 31, 2023.

Cash Flows Summary

Cash and cash equivalents were \$40.0 million, as compared to \$28.6 million at December 31, 2023, an increase of \$11.4 million for the year ended December 31, 2024, consisting of the following:

- Cash used in operating activities for the year ended December 31, 2024 was \$9.5 million, an increase of \$3.0 million, compared to \$6.5 million for the year ended December 31, 2023. The increase was primarily due to increased spending on R&D, general and administrative expenses and changes in working capital, which included an increase in prepaid assets of \$0.1 million, and was partially offset by an increase in accounts payable and accrued liabilities of \$0.2 million.
- Cash provided by financing activities for the year ended December 31, 2024, was \$20.9 million, an increase of \$14.7 million, compared to \$6.2 million for the year ended December 31, 2023. The increase was due to an increase in the net proceeds received from the issuance of common stock under our at-the-market (ATM) facility in the year ended December 31, 2024 of \$15.0 million, partially offset by an increase in net share settlement of equity awards for the payment of withholding taxes of \$0.3 million.

Balance Sheet Summary

- Total assets were \$41.0 million and total liabilities were \$0.4 million at December 31, 2024.
- · Stockholders' equity was \$40.5 million at December 31, 2024, as compared to \$28.9 million at December 31, 2023.

Operations Summary

- General and administrative expenses amounted to \$8.5 million for the year ended December 31, 2024, compared to \$7.1 million for the year ended December 31, 2023. The increase of \$1.4 million was primarily due to an increase in employee compensation and employee benefits of \$0.3 million, an increase in consulting fees and professional fees of \$0.3 million, an increase in stock-based compensation of \$0.6 million, an increase in IT expenses of \$0.1 million, an increase in travel and recruitment expenses of \$0.1 million, and an increase in patent expense of \$0.1 million, partially offset by a decrease in insurance expense of \$0.1 million.
- Total stock-based compensation included in general and administrative expenses was \$1.7 million and \$1.1 million for the years ended December 31, 2024 and 2023, respectively.
- Lightbridge's total research and development expenses amounted to \$4.6 million for the year ended December 31, 2024, compared to \$1.9 million for the year ended December 31, 2023, an increase of \$2.7 million. This increase was primarily due to the increase in R&D activities related to the development of Lightbridge FuelTM. This increase primarily consisted of an increase in INL project labor costs of \$0.9 million, an increase of outside R&D costs of \$0.4 million, an increase in R&D employees and allocated employee compensation and employee benefits of \$1.0 million, an increase in quality assurance expenses of \$0.1 million, an increase in R&D modeling computer hardware and software and travel expenses of \$0.2 million and an increase in stock-based compensation expenses of \$0.1 million.

- Total stock-based compensation included in research and development expenses was \$0.3 million and \$0.2 million for the years ended December 31, 2024 and 2023, respectively.
- We currently anticipate investing approximately \$17 million for both capital expenditures and operating expenditures in the R&D of our nuclear fuel for 2025.
- Total other income was \$1.3 million for the year ended December 31, 2024, as compared to other income of \$1.1 million for the year ended December 31, 2023, an increase of \$0.2 million. The increase in other income was due to an increase in interest income earned from the purchase of treasury bills and from our bank savings account.

Net loss was \$11.8 million for the year ended December 31, 2024, compared to \$7.9 million for the year ended December 31, 2023.

CONFERENCE CALL & AUDIO WEBCAST

Lightbridge will host a conference call on Thursday, February 27, at 10 a.m. ET. The conference call will be led by Seth Grae, President and Chief Executive Officer, with other Lightbridge executives available to answer questions.

To access the call by phone, please register using this link (registration link), and you will be provided with dial-in details. To avoid delays, we encourage participants to dial into the conference call fifteen minutes before the scheduled start time. The webcast can be accessed at the following link (webcast).

A webcast replay will also be available for a limited time at the following link (webcast replay).

About Lightbridge Corporation

Lightbridge Corporation (NASDAQ: LTBR) is focused on developing advanced nuclear fuel technology essential for delivering abundant, zero-emission, clean energy and providing energy security to the world. The Company is developing Lightbridge Fuel TM , a proprietary next-generation nuclear fuel technology for existing light water reactors 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 (SMRs) to bring 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. Lightbridge is participating in two university-led studies through the DOE Nuclear Energy University Program at Massachusetts Institute of Technology and Texas A&M University. An extensive worldwide patent portfolio backs Lightbridge's innovative fuel technology. Lightbridge is included in the Russell Microcap® Index. 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

Lightbridge is on YouTube. Subscribe to access past demonstrations, interviews, and other video content at https://www.youtube.com/@lightbridgecorporation

Lightbridge is on X (formerly Twitter). Sign up to follow @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; the degree of market adoption of Lightbridge's product and service offerings; Lightbridge's ability to fund general corporate overhead and outside research and development costs; market competition; our ability to attract and retain qualified employees; dependence on strategic partners; demand for fuel for nuclear reactors; Lightbridge's ability to manage its business effectively in a rapidly evolving market; the availability of nuclear test reactors and the risks associated with unexpected changes in Lightbridge's fuel development timeline; the increased costs associated with metallization of Lightbridge's nuclear fuel; public perception of nuclear energy generally; changes in the political environment; risks associated with war in Europe; changes in the laws, rules and regulations governing Lightbridge's business; development and utilization of, and challenges to, Lightbridge's intellectual property; risks associated with potential shareholder activism; potential and contingent liabilities; as well as 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 the 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, 2023, 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.

Investor Relations Contact:

Matthew Abenante, IRC Director of Investor Relations Tel: +1 (347) 947-2093 ir@ltbridge.com

*** tables follow ***

LIGHTBRIDGE CORPORATION CONSOLIDATED BALANCE SHEETS

	D	ecember 31, 2024	D	ecember 31, 2023
ASSETS				
Current Assets				
Cash and cash equivalents	\$	39,990,827	\$	28,598,445
Prepaid expenses and other current assets		324,378		207,063
Total Current Assets		40,315,205		28,805,508
Other Assets				
Prepaid project costs and other long-term assets		528,805		483,000
Trademarks		108,865		108,865
Total Assets	\$	40,952,875	\$	29,397,373
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current Liabilities				
Accounts payable and accrued liabilities	\$	424,585	\$	486,326
Total Current Liabilities		424,585		486,326
Stockholders' Equity				
Preferred stock, \$0.001 par value, 10,000,000 authorized shares, 0 shares issued and outstanding at December 31, 2024 and 2023		_		_
Common stock, \$0.001 par value, 25,000,000 authorized, 18,783,912 shares and 13,698,274 shares issued and				
outstanding at December 31, 2024 and 2023, respectively		18,784		13,698
Additional paid-in capital		204,694,348		181,295,125
Accumulated deficit		(164,184,842)		(152,397,776)
Total Stockholders' Equity		40,528,290		28,911,047
Total Liabilities and Stockholders' Equity	\$	40,952,875	\$	29,397,373

LIGHTBRIDGE CORPORATION CONSOLIDATED STATEMENTS OF OPERATIONS

		Year Ended December 31,		
	2024	2023		
Revenue	\$	<u> </u>		
Operating Expenses				
General and administrative	8,460,519	7,149,773		
Research and development	4,598,978	1,922,865		
Total Operating Expenses	13,059,497	9,072,638		
Other Operating Income				
Contributed services - research and development	_	31,028		
Total Other Operating Income	_	31,028		
Operating Loss	(13,059,497)	(9,041,610)		
Other Income				
Interest income	1,272,431	1,132,964		
Total Other Income	1,272,431	1,132,964		
Net Loss Before Income Taxes	(11,787,066)	(7,908,646)		
Income taxes				
Net Loss	<u>\$ (11,787,066)</u>	(7,908,646)		
Net Loss Per Common Share				
Basic and diluted	\$ (0.81)	\$ (0.65)		
Weighted Average Number of Common Shares Outstanding	14,487,834	12,099,574		
6				

LIGHTBRIDGE CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS

		Year Ended December 31,		
	2024	2023		
Operating Activities	2024	2023		
Net Loss	\$ (11,787,066)	\$ (7,908,646		
Adjustments to reconcile net loss to net cash used in operating activities	\$ (11,787,000)	\$ (7,900,040		
Common stock issued for services	110,806	45,000		
Stock-based compensation	2,038,231	1,257,717		
Stock-based compensation	2,030,231	1,237,717		
Changes in operating assets and liabilities				
Prepaid expenses and other current assets	(3,121)	(91,799		
Prepaid project costs and other long-term assets	(45,805)	(138,000		
Accounts payable and accrued liabilities	193,259	350,995		
Net Cash Used in Operating Activities	(9,493,696)	(6,484,733		
The Cash Osea in Operating Neuvicles	(5,155,656)	(0,101,733		
Investing Activities				
Trademarks	<u> </u>	(640		
Net Cash Used in Investing Activities		(640		
Tot Cush Osca in investing rearries		(010		
Financing Activities				
Net proceeds from the issuances of common stock	21,412,505	6,405,431		
Net proceeds from the exercise of stock options	41,921			
Payments for taxes related to net share settlement of equity awards	(568,348)	(221,610		
Net Cash Provided by Financing Activities	20,886,078	6,183,821		
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Net Increase (Decrease) in Cash and Cash Equivalents	11,392,382	(301,552		
Cash and Cash Equivalents, Beginning of Year	28,598,445	28,899,997		
Cash and Cash Equivalents, End of Year	\$ 39,990,827	\$ 28,598,445		
Cush and Cush Equivalents, End of Fedi	Ψ 37,770,021	20,370,113		
Supplemental Disclosure of Cash Flow Information				
Cash paid during the year:				
Interest paid	s —	s —		
Income taxes paid	\$ — \$ —	\$ — \$ —		
Non-Cash Financing Activities	Ψ	y		
	¢ 255,000	e 215.000		
Payment of accrued liabilities with common stock		\$ 215,000		
Common stock issued for consulting services	\$ 180,000	\$ —		