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): May 9, 2024

LIGHTBRIDGE CORPORATION

(Exact name of registrant as specified in its charter) 001-34487 91-1975651 Nevada (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: 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 Nasdaq 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 May 9, 2024, Lightbridge Corporation issued a press release relating to its results for the quarter ended March 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 May 9, 2024
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).
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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: May 9, 2024 By: /s/ Seth Grae

Name: Seth Grae

Title: President and Chief Executive Officer

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Lightbridge Provides Business Update and Announces First Quarter 2024 Financial Results

Conference Call on Friday, May 10th at 11 a.m. ET

RESTON, Va, May 9, 2024 (GLOBE NEWSWIRE) – Lightbridge Corporation ("Lightbridge") (Nasdaq: LTBR), an advanced nuclear fuel technology company, announced its financial results for the first quarter ended March 31, 2024, and provided an update on the Company's continued progress.

Seth Grae, President & Chief Executive Officer of Lightbridge Corporation, commented, "Lightbridge has achieved a significant milestone under our strategic partnership project agreement at Idaho National Laboratory (INL). INL demonstrated the production of a partial-length rod sample using an alloy of depleted uranium and zirconium. INL and Lightbridge will work together to analyze the extruded rod to confirm the extrusion process parameters prior to performing additional extrusions using an alloy of depleted uranium and zirconium materials later this year. Next year, we plan to produce coupon samples for irradiation testing in the Advanced Test Reactor at INL using an alloy of enriched uranium and zirconium."

"Our advancement in nuclear fuel brings great potential towards extending the operational life of the fuel in reactors and introducing substantial safety benefits for today's reactors and for the emerging small modular reactors (SMRs) globally. We are also designing the fuel to enable adjustment of power output of SMRs in response to fluctuations in supply by wind and solar generation, for a zero-carbon electric grid."

"Looking ahead, Lightbridge is well positioned to capitalize on these opportunities. The increasing global demand for clean, reliable power, coupled with international initiatives set forth at COP28 to significantly increase nuclear capacity by 2050, presents substantial growth prospects for our technology," concluded Mr. Grae.

Financial Highlights

Working capital was \$27.4 million at March 31, 2024, versus \$28.3 million at December 31, 2023.

Cash Flows Summary

Cash and cash equivalents were \$27.9 million, as compared to \$28.6 million at December 31, 2023, a decrease of \$0.7 million for the first quarter ended March 31, 2024, consisting of the following:

- o Cash used in operating activities for the first quarter ended March 31, 2024 was \$1.9 million, an increase of \$0.4 million, compared to \$1.5 million for the first quarter ended March 31, 2023. The increase was primarily due to increased spending on research and development (R&D) and general and administrative expenses.
- Cash provided by financing activities for the first quarter ended March 31, 2024 was \$1.2 million, an increase of \$0.5 million, compared to \$0.7 million for the first quarter ended March 31, 2023. This increase was due to an increase in the net proceeds received from the issuance of common stock under our at-the-market facility.

Balance Sheet Summary

Total assets were \$28.9 million and total liabilities were \$0.9 million at March 31, 2024.

o Stockholders' equity was \$28.0 million at March 31, 2024, as compared to \$28.9 million at December 31, 2023.

Operations Summary

- General and administrative expenses amounted to \$2.2 million for the first quarter ended March 31, 2024, compared to \$1.9 million for the first quarter ended March 31, 2023. The increase of \$0.3 million was primarily due to an increase in employee compensation and employee benefits and directors' fees of \$0.1 million, an increase in postage and recruitment expenses of \$0.1 million, and an increase in stock-based compensation of \$0.1 million.
- Lightbridge's total research and development expenses amounted to \$1.0 million for the first quarter ended March 31, 2024, compared to \$0.4 million for the first quarter ended March 31, 2023, an increase of \$0.6 million. This increase was primarily due to the increase in R&D activities related to the development of our fuel. This increase primarily consisted of an increase in INL project labor costs and outside R&D expenses of \$0.5 million, and an increase in allocated employee compensation and employee benefits to R&D of \$0.1 million.
- Total other income was \$0.4 million for the first quarter ended March 31, 2024, compared to other income of \$0.3 million for the first quarter ended March 31, 2023, an increase of \$0.1 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 \$2.8 million for the first quarter ended March 31, 2024, compared to \$2.0 million for the first quarter ended March 31, 2023.

CONFERENCE CALL & AUDIO WEBCAST

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 at 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 FuelTM, 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 X (formerly Twitter). Sign up to follow @LightbridgeCorp athttp://twitter.com/lightbridgecorp.

Lightbridge is on Threads @lightbridgecorp.

For an introductory video on Lightbridge, please visit www.ltbridge.com or click here to watch the video.

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:

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*** tables follow ***

LIGHTBRIDGE CORPORATION UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS

	March 31, 2024	December 31, 2023
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 27,942,421	\$ 28,598,445
Prepaid expenses and other current assets	401,859	207,063
Total Current Assets	28,344,280	28,805,508
Other Assets		
Prepaid project costs and other long-term assets	479,625	483,000
Trademarks	108,865	108,865
Total Assets	\$ 28,932,770	\$ 29,397,373
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 907,421	\$ 486,326
Total Current Liabilities	907,421	486,326
Total Careti Entonines	507,121	100,520
Stockholders' Equity		
Preferred stock, \$0.001 par value, 10,000,000 authorized shares, 0 shares issued and outstanding at March 31,		
2024 and December 31, 2023	_	_
Common stock, \$0.001 par value, 25,000,000 authorized, 14,189,780 shares and 13,698,274 shares issued and		12.500
outstanding at March 31, 2024 and December 31, 2023, respectively	14,190	13,698
Additional paid-in capital	183,228,519	181,295,125
Accumulated deficit	(155,217,360)	(152,397,776)
Total Stockholders' Equity	28,025,349	28,911,047
Total Liabilities and Stockholders' Equity	\$ 28,932,770	\$ 29,397,373
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LIGHTBRIDGE CORPORATION UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

		onths Ended rch 31,
	2024	2023
Revenue	<u>\$</u>	\$ —
Operating Expenses		
General and administrative	2,157,745	1,865,929
Research and development	1,023,823	448,044
Total Operating Expenses	3,181,568	2,313,973
Other Operating Income		
Contributed services - research and development		31,028
Total Other Operating Income		31,028
Operating Loss	(3,181,568)	(2,282,945)
Other Income		
Interest income	361,984	256,365
Total Other Income	361,984	256,365
Net Loss Before Income Taxes	(2,819,584)	(2,026,580)
Income taxes		
Net Loss	\$ (2,819,584)	\$ (2,026,580)
Net Loss Per Common Share		
Basic and diluted	\$ (0.21)	\$ (0.17)
Weighted Average Number of Common Shares Outstanding	13,491,954	11,673,736
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LIGHTBRIDGE CORPORATION UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

		Three Months Ended March 31,	
	2024		2023
Operating Activities			
Net Loss	\$ (2,819,	584) \$	(2,026,580)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation	456,	904	284,360
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(194,	796)	(278,173)
Prepaid project costs and other long-term assets	· /	375	(=,,,,,,,
Accounts payable and accrued liabilities	676.		440,647
Net Cash Used in Operating Activities	(1,878,		(1,579,746)
Net Cash Used in Investing Activities		_	_
Financing Activities			
Net proceeds from the issuances of common stock	1,221,)82	731,052
Net Cash Provided by Financing Activities	1,221,	982	731,052
Net Decrease in Cash and Cash Equivalents	(656,	024)	(848,694)
Cash and Cash Equivalents, Beginning of Period	28,598,	145	28,899,997
Cash and Cash Equivalents, End of Period	\$ 27,942,	421 \$	28,051,303
Supplemental Disclosure of Cash Flow Information			
Cash paid during the period:			
Interest paid	\$	— \$	_
Income taxes paid	\$	- \$	_
Non-Cash Financing Activities:			
Payment of accrued liabilities with common stock	\$ 255,	000 \$	215,000
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