

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

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended: **March 31, 2025**

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: **001-34487**

LIGHTBRIDGE CORPORATION

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of incorporation or organization)

91-1975651

(I.R.S. Employer Identification No.)

11710 Plaza America Drive, Suite 2000 Reston, VA 20190

(Address of principal executive offices, Zip Code)

(571) 730-1200

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class:

Common Stock, \$0.001 par value

Trading Symbol(s):

LTBR

Name of Each Exchange on Which Registered:

The Nasdaq Capital Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer

☐

Accelerated Filer

☐

Non-accelerated Filer

☒

Smaller reporting company

☒

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. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares outstanding of the issuer's common stock, as of May 1, 2025 is as follows:

Class of Securities

Common Stock, \$0.001 par value

Shares Outstanding

22,538,160

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FORM 10-Q
MARCH 31, 2025

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PART I-FINANCIAL INFORMATION
ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

LIGHTBRIDGE CORPORATION
UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS

	March 31, 2025	December 31, 2024
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 56,929,988	\$ 39,990,827
Prepaid expenses and other current assets	546,267	324,378
Total Current Assets	57,476,255	40,315,205
Other Assets		
Prepaid project costs and other long-term assets	702,562	528,805
Trademarks	108,865	108,865
Total Assets	<u>\$ 58,287,682</u>	<u>\$ 40,952,875</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 966,209	\$ 424,585
Total Current Liabilities	966,209	424,585
Commitments and contingencies - Note 5		
Stockholders' Equity		
Preferred stock, \$0.001 par value, 10,000,000 authorized shares, 1 share and 0 shares issued and outstanding at March 31, 2025 and December 31, 2024, respectively	—	—
Common stock, \$0.001 par value, 25,000,000 authorized, 21,557,343 shares and 18,783,912 shares issued and outstanding at March 31, 2025 and December 31, 2024, respectively	21,557	18,784
Additional paid-in capital	226,255,770	204,694,348
Accumulated deficit	(168,955,854)	(164,184,842)
Total Stockholders' Equity	57,321,473	40,528,290
Total Liabilities and Stockholders' Equity	<u>\$ 58,287,682</u>	<u>\$ 40,952,875</u>

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

LIGHTBRIDGE CORPORATION
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	Three Months Ended	
	March 31,	
	2025	2024
Revenue	\$ —	\$ —
Operating Expenses		
General and administrative	3,480,010	2,157,745
Research and development	1,665,913	1,023,823
Total Operating Expenses	5,145,923	3,181,568
Operating Loss	(5,145,923)	(3,181,568)
Other Income		
Interest income	374,911	361,984
Total Other Income	374,911	361,984
Net Loss Before Income Taxes	(4,771,012)	(2,819,584)
Income taxes	—	—
Net Loss	<u>\$ (4,771,012)</u>	<u>\$ (2,819,584)</u>
Net Loss Per Common Share		
Basic and diluted	\$ (0.24)	\$ (0.21)
Weighted Average Number of Common Shares Outstanding	19,547,312	13,491,954

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

LIGHTBRIDGE CORPORATION
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
FOR THE THREE MONTHS ENDED MARCH 31, 2025 AND 2024

	Common Stock		Additional	Accumulated	Total
	Shares	Amount	Paid-in Capital	Deficit	Stockholders' Equity
Balance - January 1, 2024	13,698,274	\$ 13,698	\$ 181,295,125	\$ (152,397,776)	\$ 28,911,047
Shares issued - registered offerings - net of offering costs of \$155,686	427,300	428	1,221,554	—	1,221,982
Shares issued to consultant & directors for services	64,206	64	254,936	—	255,000
Stock-based compensation	—	—	456,904	—	456,904
Net loss for the three months ended March 31, 2024	—	—	—	(2,819,584)	(2,819,584)
Balance - March 31, 2024	<u>14,189,780</u>	<u>\$ 14,190</u>	<u>\$ 183,228,519</u>	<u>\$ (155,217,360)</u>	<u>\$ 28,025,349</u>
	Common Stock		Additional	Accumulated	Total
	Shares	Amount	Paid-in Capital	Deficit	Stockholders' Equity
Balance - January 1, 2025	18,783,912	\$ 18,784	\$ 204,694,348	\$ (164,184,842)	\$ 40,528,290
Restricted shares awards issued	57,940	58	(58)	—	—
Share settlement for withholding taxes paid upon vesting of restricted stock awards	(25,148)	(25)	(194,853)	—	(194,878)
Shares issued - registered offerings - net of offering costs of \$657,914	2,605,619	2,605	20,210,590	—	20,213,195
Shares issued to consultant & directors for services	89,086	89	29,911	—	30,000
Shares issued through the exercise of options	45,934	46	220,651	—	220,697
Stock-based compensation	—	—	1,295,181	—	1,295,181
Net loss for the three months ended March 31, 2025	—	—	—	(4,771,012)	(4,771,012)
Balance - March 31, 2025	<u>21,557,343</u>	<u>\$ 21,557</u>	<u>\$ 226,255,770</u>	<u>\$ (168,955,854)</u>	<u>\$ 57,321,473</u>

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

LIGHTBRIDGE CORPORATION
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Three Months Ended March 31,	
	2025	2024
Operating Activities		
Net Loss	\$ (4,771,012)	\$ (2,819,584)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	1,355,181	456,904
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(266,889)	(194,796)
Prepaid project costs and other long-term assets	(173,757)	3,375
Accounts payable and accrued liabilities	556,624	676,095
Net Cash Used in Operating Activities	(3,299,853)	(1,878,006)
Net Cash Used in Investing Activities	—	—
Financing Activities		
Net proceeds from the issuances of common stock	20,213,195	1,221,982
Net proceeds from the exercise of stock options	220,697	—
Payments for taxes related to net share settlement of equity awards	(194,878)	—
Net Cash Provided by Financing Activities	20,239,014	1,221,982
Net Increase (Decrease) in Cash and Cash Equivalents	16,939,161	(656,024)
Cash and Cash Equivalents, Beginning of Period	39,990,827	28,598,445
Cash and Cash Equivalents, End of Period	<u>\$ 56,929,988</u>	<u>\$ 27,942,421</u>
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	\$ 15,000	\$ 15,000

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements

LIGHTBRIDGE CORPORATION
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Nature of Operations, Basis of Presentation, Summary of Significant Accounting Policies and Recent Accounting Pronouncements

Nature of Operations and Basis of Presentation

When used in these notes, the terms “Lightbridge,” “Company,” “we,” “us” or “our” mean Lightbridge Corporation and all entities included in the condensed consolidated financial statements.

The Company was formed on October 6, 2006, when Thorium Power, Ltd., which was incorporated in the state of Nevada on February 2, 1999, merged with Thorium Power, Inc. (TPI), which was incorporated in the state of Delaware on January 8, 1992. On September 29, 2009, the Company changed its name from Thorium Power, Ltd. to Lightbridge Corporation and began its focus on developing and commercializing metallic nuclear fuels. The Company is a nuclear fuel technology company developing its nuclear fuel. The Company views its operations and manages its business as one business segment, which is the development and commercialization of its nuclear fuel. These unaudited condensed consolidated financial statements include the accounts of the Company, and the Company’s wholly-owned subsidiaries, TPI, a Delaware corporation, and Lightbridge International Holding LLC, a Delaware limited liability company. These wholly-owned subsidiaries are inactive, and all significant intercompany transactions and balances have been eliminated in consolidation.

The accompanying unaudited condensed consolidated financial statements of Lightbridge Corporation and its subsidiaries have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission, or the SEC, including the instructions to Form 10-Q and Regulation S-X. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States of America (GAAP), including a summary of the Company’s significant accounting policies, have been condensed or omitted from these statements pursuant to such rules and regulations and, accordingly, they do not include all the information and footnotes necessary for comprehensive condensed consolidated financial statements and should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2024, included in the Annual Report on Form 10-K for the year ended December 31, 2024 filed with the SEC on March 3, 2025.

In the opinion of the management of the Company, all adjustments, which are of a normal recurring nature, necessary for a fair statement of the results for the three-month period have been made. Results for the interim period presented are not necessarily indicative of the results that might be expected for the entire fiscal year.

Summary of Significant Accounting Policies

Fair Value of Financial Instruments

The Company determined fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between unaffiliated market participants at the measurement date.

Accounting Standards Codification (ASC), *Fair Value Measurement* (ASC 820), established a fair value hierarchy that prioritizes the inputs used to measure fair value. Assets and liabilities measured at fair value were categorized based on whether the inputs are observable in the market and the degree that the inputs are observable. The hierarchy gives the highest priority to active markets for identical assets and liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement). The categorization of financial instruments within the valuation hierarchy was based on the lowest level of input that is significant to the fair value measurement. At the end of the reporting period, the Company reviews U.S. treasury instruments held to determine whether the securities are of the most recent issuance of that security with the same maturity (referred to as “on-the-run”, which is the most liquid version of the maturity band). If a U.S. treasury instrument held at the end of the reporting period was from the most recent issuance it is classified as level 1, otherwise it is referred to as “off-the-run” and is classified as level 2. The three levels of the fair value hierarchy were as follows:

Level 1 - Observable inputs such as quoted prices in active markets for identical assets or liabilities;

Level 2 - Inputs other than quoted prices that were observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that were not active and inputs other than quoted prices that were observable for the asset or liability; and

Level 3 - Unobservable inputs that reflect management’s assumptions.

For disclosure purposes, assets and liabilities were classified in their entirety in the fair value hierarchy level based on the lowest level of input that was significant to the overall fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement required judgment and may have affected the placement within the fair value hierarchy levels.

The Company's financial instruments consisted principally of cash and cash equivalents, accounts payable and accrued liabilities. The carrying amounts of cash, accounts payable and accrued liabilities are considered to be Level 1 measurements, because of the short-term nature of those instruments. Cash equivalents are primarily composed of US Treasury instruments having maturity dates of 30 to 90 days. The Company purchased \$37 million of US Treasury instruments for the three months ended March 31, 2025.

The following table summarized the valuation of the Company's financial instruments that fell within the fair value hierarchy (in millions) at March 31, 2025:

	Level I	Level II	Level III
Cash and cash equivalents	\$ 19.9	\$ 37.0	\$ —
Accounts payable and accrued liabilities	\$ 1.0	\$ —	\$ —

The following table summarized the valuation of the Company's financial instruments that fell within the fair value hierarchy (in millions) at December 31, 2024:

	Level I	Level II	Level III
Cash and cash equivalents	\$ 40.0	\$ —	\$ —
Accounts payable and accrued liabilities	\$ 0.4	\$ —	\$ —

Certain Risks and Uncertainties

The Company will need additional funding and/or in-kind support via a combination of strategic alliances, government grants, commercial loans, further offerings of equity securities, or an offering of debt securities in order to support its future research and development (R&D) activities required to further enhance and complete the development and commercialization of its fuel products.

There can be no assurance that the Company will be able to successfully continue to conduct its operations if there is a lack of financial resources available in the future to continue its fuel development activities, and a failure to do so would have a material adverse effect on the Company's future R&D activities, financial position, results of operations, and cash flows. Also, the success of the Company's operations will be subject to other numerous contingencies, some of which are beyond management's control. These contingencies include general and regional economic conditions, contingent liabilities, potential competition with other nuclear fuel developers, including those entities developing accident tolerant fuels (ATFs), changes in government regulations, risks related to the R&D of the Lightbridge Fuel™, regulatory approval of the Company's fuel, support for nuclear power, changes in accounting and taxation standards, inability to achieve overall short-term and long-term R&D milestones toward commercialization, future impairment charges to the Company's assets, and global or regional catastrophic events. The Company may also be subject to various additional political, economic, and other uncertainties.

The Company is engaged in significant research and development (R&D) activities to advance its nuclear fuel technology at Idaho National Laboratory (INL). For the three months ended March 31, 2025, R&D expenses associated with activities conducted at the INL accounted for approximately 47% of the Company's total R&D expenditure. The Company currently relies on INL for developing, testing and evaluating its nuclear fuel. Any disruption in access to INL's resources, including changes in government policies, facility downtime, regulatory constraints, or unforeseen operational challenges could have a material adverse effect on the Company's current ability to advance its R&D activities.

Recent Accounting Pronouncements

ASU No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, was issued by the FASB in December 2023. This guidance enhances income tax disclosure requirements by mandating the disclosure of (1) specific categories in the rate reconciliation, (2) income or loss from continuing operations before income taxes, disaggregated between domestic and foreign, and (3) income tax expense or benefit from continuing operations, disaggregated by federal, state, and foreign. The ASU also requires disclosure of income tax payments to federal, state, local, and foreign jurisdictions, among other changes. The standard is effective for annual periods beginning after December 15, 2024, and will be adopted by the Company as permitted. The Company will apply the guidance on a prospective basis and the adoption is not expected to have a material impact on its condensed consolidated financial statements or related disclosures.

In November 2024, the FASB issued ASU No. 2024-03, *Income Statement - Reporting Comprehensive Income - Expense Disaggregation Disclosures* (Subtopic 220-40): *Disaggregation of Income Statement Expenses* (“ASU 2024-03”), which required disclosure of certain costs and expenses on an interim and annual basis in the notes to the consolidated financial statements. The guidance is effective for annual reporting periods beginning after December 15, 2026 and interim periods within annual reporting periods beginning after December 15, 2027. Early adoption is permitted. The guidance is to be applied either (1) prospectively to financial statements issued for reporting periods after the effective date or (2) retrospectively to any or all prior periods presented in the financial statements.

The Company has evaluated other recently issued, but not yet effective, accounting standards that have been issued or proposed by the FASB or other standards-setting bodies through the filing date of these unaudited condensed consolidated financial statements and does not believe the future adoption of any such standards will have a material impact on the consolidated financial statements and related disclosures.

Note 2. Net Loss Per Share

Basic net loss per share is computed using the weighted-average number of common shares outstanding during the reporting period, except that it does not include unvested common shares subject to repurchase or cancellation. Diluted net loss per share is computed using the weighted-average number of common shares and, if dilutive, potential common shares outstanding during the period. Potential common shares consist of the incremental common shares issuable upon the exercise of stock options.

The outstanding securities noted below have been excluded from the computation of diluted weighted shares outstanding for the three months ended March 31, 2025 and 2024, as they would have been anti-dilutive due to the Company’s losses at March 31, 2025 and 2024 and also because the exercise price of certain of these outstanding securities was greater than the average closing price of the Company’s common stock.

	Three Months Ended March 31,	
	2025	2024
Stock options outstanding	429,454	555,582
Restricted stock awards outstanding	743,702	557,688
Total	1,173,156	1,113,270

Note 3. Prepaid Project Costs and Other Long-term Assets

In 2022, the Company entered into two agreements with Idaho National Laboratory (INL), in collaboration with the Department of Energy (DOE), to support the development of Lightbridge Fuel™. At the time of signing, the Company made advance payments for future project work totaling \$0.4 million to Battelle Energy Alliance, LLC (BEA), the DOE’s operating contractor for INL. In May 2023, the Company and INL modified the agreements to extend the contract term to May 2029, aligning it with the duration of the irradiation testing, and increasing the advance payments by \$0.1 million to \$0.5 million. During the quarter ended March 31, 2025, the Company made additional advance payments of \$0.6 million which subsequently offset \$0.4 million in project costs. As of March 31, 2025, and December 31, 2024, the Company’s prepaid project costs were \$0.7 million and \$0.5 million, respectively.

Note 4. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consist of the following (rounded in millions):

	March 31, 2025	December 31, 2024
Trade payables	\$ 0.3	\$ 0.2
Accrued research and development expenses	0.1	0.1
Accrued bonus	0.3	—
Accrued payroll taxes and professional fees	0.3	0.1
Total	<u>\$ 1.0</u>	<u>\$ 0.4</u>

Note 5. Commitments and ContingenciesOperating Leases

The Company leased office space for a 12-month term from January 1, 2025 through December 31, 2025 with a monthly payment of approximately \$8,000. The future minimum lease payments required under the non-cancellable operating leases for 2025 total approximately \$0.1 million. Total rent expense for the three months ended March 31, 2025 and 2024 was approximately \$25,000 and \$24,000, respectively.

Note 6. Research and Development CostsINL Project

In 2022, Lightbridge entered into agreements with BEA, to support the development of Lightbridge Fuel™. These framework agreements use an innovative structure that consists of an “umbrella” Strategic Partnership Project Agreement (SPPA) and an “umbrella” Cooperative Research and Development Agreement (CRADA), with an initial duration of seven years. Throughout the duration of these umbrella agreements, all R&D work contracted with BEA is through the issuance of Project Task Statements (PTS). The initial phase of work under the two agreements is expected to culminate in future irradiation testing in the INL Advanced Test Reactor of fuel samples using enriched uranium supplied by the DOE. The initial phase of work aims to generate irradiation performance data for Lightbridge’s delta-phase uranium-zirconium alloy relating to various thermophysical properties. Data gathered during future post-irradiation examination work are expected to support fuel performance modeling and regulatory licensing efforts for the commercial deployment of Lightbridge Fuel™. For the three months ended March 31, 2025 and 2024, the Company recorded \$0.8 million and \$0.4 million in R&D expenses associated with INL, respectively.

INL Modifications to the CRADA and SPPA Project Task Statements

On January 16, 2025, the Company and BEA entered into Modification No. 3 to the PTS No. 1 under the CRADA, dated September 27, 2022, as amended on May 22, 2023 and May 30, 2023, by and between the Company and BEA. Pursuant to the terms of Modification No. 3, the potential amounts payable by the Company to reimburse BEA for its expenses and employee time associated with R&D activities were increased by approximately \$1.6 million, bringing the total estimated cost for the work to be performed under the “umbrella” CRADA to \$4.2 million. This modification also required that a \$600,000 advance payment be made, which was due and paid on January 16, 2025.

On March 18, 2025, the Company and BEA entered into Modification No. 4 to the PTS No. 1 under the SPPA, dated December 9, 2022, as amended on May 23, 2023, March 26, 2024 and October 24, 2024, by and between the Company and BEA. Pursuant to the terms of Modification No. 4, the potential amounts payable by the Company to reimburse BEA for its expenses and employee time were increased by approximately \$0.6 million, bringing the total estimated cost for the work to be performed under the “umbrella” SPPA to \$2.6 million.

After accounting for Modification No. 4, cash payments from Lightbridge to BEA under both CRADA and SPPA are estimated at approximately \$6.8 million on a cost reimbursable basis over the performance periods. These obligations are generally cancellable with 30 days’ notice and, therefore, are not considered firm commitments.

Romania Feasibility Study

On October 16, 2023, the Company engaged RATEN ICN in Romania to perform an engineering study to assess the compatibility and suitability of Lightbridge Fuel™ for use in Canada Deuterium Uranium (CANDU) reactors. The total price of approximately \$0.2 million was payable in three installments, including an advance payment of \$0.1 million and an interim milestone payment and final payment totaling approximately \$0.1 million. The Company made its final payment in December 2024 when the study was completed. The Company has no further obligations under the agreement. For the three months ended March 31, 2025 and 2024, the Company recorded \$0 million and \$0.1 million, respectively in R&D expenses associated with RATEN ICN feasibility study.

FEED Study with Centrus Energy for a Lightbridge Pilot Fuel Fabrication Facility

On December 5, 2023, the Company entered into an agreement with Centrus Energy to conduct a front-end engineering and design (FEED) study to evaluate deployment of a Lightbridge Pilot Fuel Fabrication Facility (LPFFF) at the American Centrifuge Plant in Piketon, Ohio. The Company made its final payment in December 2024 for the study was completed in 2024 and has no further obligations under the agreement. For the three months ended March 31, 2025 and 2024, the Company recorded \$0 million and \$0.2 million, respectively, in R&D expenses associated with this FEED study.

Note 7. Stockholders' Equity and Stock-Based Compensation

At March 31, 2025, the Company had 21,557,343 common shares outstanding (including outstanding restricted stock awards (RSAs) totaling 743,702 shares). Also outstanding were stock options relating to 429,454 shares of common stock (of which 409,789 stock options were vested), all totaling 21,986,797 shares of common stock and all common stock equivalents, outstanding as of March 31, 2025.

At December 31, 2024, the Company had 18,783,912 common shares outstanding (including outstanding RSAs totaling 781,864 shares). Also outstanding were stock options relating to 464,940 shares of common stock (of which 445,275 stock options were vested), all totaling 19,248,852 shares of common stock and all common stock equivalents, outstanding as of December 31, 2024.

Issuance of Series X Preferred Stock

On February 27, 2025, the Company entered into a Subscription and Investment Representation Agreement with the chair of the Audit Committee and an independent member of the Board (the "Purchaser"), pursuant to which the Company agreed to issue and sell one (1) share of the Company's Series X Preferred Stock, par value \$0.001 per share (the "Series X Preferred Stock"), to the Purchaser for \$100 in cash. The sale closed on February 27, 2025 and the \$100 was fully paid-up and recorded under current liabilities. The Company will redeem the Series X Preferred Stock for \$100 cash after the Company's annual 2025 shareholder meeting (the "Annual Meeting").

The Series X Preferred Stock does not have any voting rights except with respect to any proposal to increase the number of authorized shares of common stock of the Company. Each share of Series X Preferred Stock will be entitled to 25,000,000 votes on such proposal, voting together with the holders of the Company's common stock. The votes by the holder of Series X Preferred Stock will be cast at the Annual Meeting automatically in the same "mirrored" proportion as the aggregate votes cast "for" and "against" the proposal by the holders of the common stock who vote on such proposal (excluding abstentions, broker non-votes and shares of common stock that are not voted "for" or "against" such proposal). The voting power attributable to the Series X Preferred Stock will be disregarded for purposes of determining whether a quorum is present at the Annual Meeting.

Pursuant to the terms of issuance, the Series X Preferred Stock will be redeemed at its original issuance price of \$100 upon the earlier of (i) the order of the Board of Directors in its sole discretion, automatically and effective at such date and time as determined and specified by the Board of Directors in its sole discretion and (ii) automatically and effective immediately after the publishing or other public announcement by the Company of the final results of any stockholder vote on a proposal to increase the authorized common stock.

Common Stock Equity Offerings

Increase in Authorized Common Shares

On February 26, 2025, the Company's Board of Directors approved increasing the authorized common shares from 25,000,000 shares to 100,000,000 shares. This change will take effect upon receiving majority shareholder approval at the 2025 shareholder annual meeting on May 8, 2025 and filing the amendment to the Company's Articles of Incorporation with the Nevada Secretary of State (note 9).

At-the-Market (ATM) Offerings

On May 28, 2019, the Company entered into an at-the-market equity offering sales agreement with Stifel, Nicolaus & Company, Incorporated (Stifel), which was amended on April 9, 2021 and May 8, 2024 (the ATM Agreement), pursuant to which the Company may issue and sell shares of its common stock from time to time through Stifel as the Company's sales agent. Under this amended agreement, the Company pays Stifel a commission equal to 3.0% of the aggregate gross proceeds of any sales of common stock under the agreement. The offering of common stock pursuant to this agreement can be terminated with 10 days written notice by either party. Sales of the Company's common stock through Stifel, if any, will be made by any method that is deemed to be an "at-the-market" equity offering as defined in Rule 415 promulgated under the Securities Act of 1933.

The Company filed a shelf registration statement on Form S-3 with the Securities and Exchange Commission (SEC) on March 29, 2024, registering the sale of up to \$75.0 million of the Company's securities that was declared effective on April 19, 2024. On May 10, 2024, the Company filed a prospectus supplement, which was further supplemented on July 19, 2024 and August 9, 2024 (collectively, the "First Prospectus Supplement"), pursuant to which the Company may offer and sell shares of common stock having an aggregate offering price of up to \$12.6 million from time to time through the ATM. The Company exhausted all sales under the First Prospectus Supplement. On November 22, 2024, the Company filed a prospectus supplement pursuant to which the Company may offer and sell shares of common stock having an aggregate offering price of up to \$45.0 million from time to time through the ATM.

The Company records its ATM sales on a settlement date basis. The Company sold 2,605,619 shares under the ATM for the three months ended March 31, 2025 resulting in net proceeds of \$20.2 million (stock issuance costs were approximately \$0.7 million). The Company records its ATM sales on a settlement date basis. The Company sold 427,300 shares under the ATM for the three months ended March 31, 2024 resulting in net proceeds of \$1.2 million (stock issuance costs were approximately \$0.2 million).

Stock-Based Compensation

2020 Omnibus Incentive Plan

On March 9, 2020, the Board of Directors adopted the Company's 2020 Omnibus Incentive Plan (as subsequently amended, the "2020 Plan"). On September 3, 2020, the shareholders approved the 2020 Plan to authorize grants of the following types of awards: (a) Options, (b) Stock Appreciation Rights, (c) Restricted Stock Awards and Restricted Stock Units, and (d) Other Stock-Based and Cash-Based Awards.

On February 27, 2024, the Board of Directors approved an increase of 700,000 shares to the authorized number of shares under the 2020 Plan, increasing the total authorized number of shares from 1,800,000 shares to 2,500,000 shares. This increase was approved by the stockholders at the shareholders' annual meeting on April 19, 2024.

The total number of shares of common stock available for issuance under the 2020 Plan was 2,500,000 shares with 1,009,389 shares available for future issuance at March 31, 2025.

On February 26, 2025, the Company's Board of Directors approved an increase of 2,500,000 shares to the authorized number of shares under the 2020 Plan, increasing the total authorized number of shares from 2,500,000 to 5,000,000. This change will take effect if approved by shareholders at the Company's 2025 shareholder annual meeting on May 8, 2025 (note 9).

Stock Options

Stock options issued to the Company's employees, directors and consultants are summarized as follows for the three months ended March 31, 2025 and 2024:

	Number of Options	Weighted Average Exercise Price	Weighted- Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding, December 31, 2024	464,940	\$ 16.24	3.07	\$ 184,818
Granted	10,448	9.42		—
Exercised	(45,934)	4.80		310,093
Forfeited	—	—		—
Expired	—	—		—
Outstanding, March 31, 2025	429,454	\$ 17.29	2.53	469,719
Vested and expected to vest, end of the period	429,454	\$ 17.29	2.53	469,719
Options exercisable, end of the period	409,789	\$ 17.97	2.22	\$ 387,153

In the three months ended March 31, 2025 and 2024, the Company issued 10,448 and 58,309 stock options, respectively, to one consultant. The 10,448 stock options and the 58,309 stock options were assigned a fair value of \$5.74 per share and \$1.03 per share, respectively (total fair value of \$60,000 for each grant). The weighted-average grant-date exercise price per share of the stock options granted for the three months ended March 31, 2025 and 2024, was \$9.42 and \$2.62, respectively.

The fair value was determined using the Black-Scholes pricing model. For expected volatility, the Company concluded that the historical volatility over the option's expected holding term provided the most reasonable basis for this estimate. For the risk-free interest rate, the Company used U.S. Treasury Note rates, which mature at approximately the same time as the option's expected holding term or option life determined by using the simplified method. The Company recognized forfeitures of equity-based awards as a reduction to compensation costs in the period in which they occur.

The following assumptions were used in the Black-Scholes pricing model to determine the fair value of stock options granted for the three months ended March 31, 2025 and 2024:

	Three Months Ended March 31,	
	2025	2024
Expected volatility	117.44%	75.36%
Risk free interest rate	3.95%	4.54%
Dividend yield rate	—	—
Expected life	2 years	2 years
Closing price per share - common stock	\$ 9.42	\$ 2.62

The intrinsic value is calculated as the difference between the fair value of the Company's common stock and the exercise price of the stock options. The fair value of the Company's common stock was \$7.46 per share and \$2.95 per share at March 31, 2025 and 2024, respectively. As of March 31, 2025, total unrecognized compensation cost related to option awards was \$35,388, which is expected to be recognized over a remaining weighted-average vesting period of 1.9 years. As of March 31, 2024, total unrecognized compensation cost related to option awards was \$35,384, which is expected to be recognized over a remaining weighted-average vesting period of 1.9 years.

Exercise of Options

For the three months ended March 31, 2025, the Company received approximately \$0.2 million of net proceeds from the exercise of 45,934 stock options from employees and consultants.

Common Stock

Consultants' Stock Issuances

For the three months ended March 31, 2025 and 2024, the Company issued 3,171 shares (with stock prices of \$4.73 per share) and 3,750 shares (with stock prices of \$4.00 per share) of common stock, respectively, to its investor relations firm for services provided during the period, recorded to general and administrative expenses. These shares vested immediately upon issuance. The expense recorded for these share issuances was \$15,000 for each quarter. The shares were valued based on the closing market price of the Company's common stock on the date of grant.

On August 19, 2024, the Board of Directors approved an equity grant valued at \$180,000 to a consulting and investment research firm, for corporate advisory services to be provided over a twelve-month period, and preparation and dissemination of a report regarding the Company, which resulted in issuing the consultant 71,713 shares of common stock on the grant date, valued at \$2.51 per share. These shares vested immediately upon issuance and are not forfeitable. The compensation cost of \$180,000 began to be recognized on a straight-line basis over the requisite service period. Approximately \$45,000 and \$0 were recorded as consulting expenses for the three months ended March 31, 2025, and 2024, respectively.

As of March 31, 2025, the unrecognized compensation cost of approximately \$69,000 was recorded under prepaid expenses and other current assets on the accompanying condensed consolidated balance sheet, which is expected to be recognized over a remaining service period of 0.4 years.

Director Compensation - Equity-Settled Awards

On December 4, 2024, the Board of Directors approved an equity grant valued at \$500,000 in total to its five directors for the service period and year ended December 31, 2024, which resulted in granting a total of 85,915 shares of common stock, valued on the grant date at \$5.82 per share on December 4, 2024, which shares vested on January 2, 2025.

On November 20, 2023, the Board of Directors approved an equity grant valued at \$240,000 in total to its six directors for the service period and year ended December 31, 2023, which resulted in granting a total of 60,456 shares of common stock, valued on the grant date at \$3.97 per share on November 20, 2023, which shares vested on January 2, 2024.

As a result, the fair value of the stock awards was measured on the grant date and recorded as an increase to stock-based compensation expense and additional paid-in capital in 2025 and 2024. The fair value of the shares granted was determined based on the closing market price of the Company's common stock on the grant date.

Restricted Stock Awards

The following summarizes the Company's restricted stock award activity and the RSA outstanding:

	Number of Shares	Weighted- Average Grant Date Fair Value	Aggregate Fair Value
Outstanding, December 31, 2024	781,864	\$ 5.19	\$ 3,698,217
Awards granted	57,940	8.63	500,022
Awards vested	(96,102)	5.67	737,535
Awards forfeited	—	—	—
Outstanding, March 31, 2025	743,702	\$ 5.40	\$ 5,548,017

On March 12, 2025, the Board of Directors approved a grant of restricted stock awards (RSAs) totaling \$0.5 million to its five directors for the service year ending December 31, 2025. This grant comprised 57,940 RSAs, valued at \$8.63 per share on the grant date, with vesting scheduled in four quarterly installments. The first installment, consisting of 14,485 RSAs, vested on March 31, 2025. This resulted in the recognition of \$0.1 million in stock-based compensation expense for the quarter ended March 31, 2025.

The aggregate fair value was calculated as the fair value of the Company's common stock. The fair value of the Company's common stock was \$7.46 and \$2.95 per share at March 31, 2025 and 2024, respectively. The fair value of the RSAs vested for the three months ended March 31, 2025 and 2024 was \$0.7 million and \$0 million, respectively.

As of March 31, 2025, all the outstanding shares of RSAs are unvested. As of March 31, 2025, total unrecognized compensation cost related to RSAs was \$3.5 million, which is expected to be recognized over a remaining weighted-average vesting period of 2.14 years.

Restricted Stock Awards Modification and Net Share Settlements for Payments of Withholding Taxes

On March 24, 2025, the Company entered into a separation agreement with a former employee. As part of the agreement, the Board of Directors approved the accelerated vesting of 70,710 RSAs, which would have otherwise been forfeited upon termination. In accordance with ASC 718, this was treated as a modification, leading to the recognition of \$0.5 million in stock-based compensation expense for the quarter ended March 31, 2025. This expense included \$0.2 million of previously unrecognized compensation cost and \$0.3 million of incremental fair value from the modification of the RSAs awarded.

To satisfy approximately \$0.2 million in payroll withholding taxes associated with the accelerated RSAs vesting, the Company withheld 21,285 shares, resulting in the issuance of 49,425 net shares to the former employee. These withheld shares were returned to the 2020 Plan share reserve for potential future issuance.

On March 14, 2025, 10,907 RSAs vested to the former employee based on his service to the Company. To satisfy approximately \$36,000 in payroll withholding taxes, the Company withheld 3,863 shares, resulting in the issuance of 7,044 net shares to the former employee. These withheld shares were returned to the 2020 Plan share reserve for potential future issuance.

RSA Summary - 2025 and 2024

As of March 31, 2025 and December 31, 2024, there were 743,702 shares and 781,864 shares of RSAs included in the total issued and outstanding common stock, respectively. Compensation expense for RSAs issued to employees and consultants are generally recognized straight line over the three-year vesting period. A total of \$1.3 million (including the \$0.5 million accelerated RSAs vesting for the former employee) and \$0.4 million of stock-based compensation expense was recorded for the three months ended March 31, 2025 and 2024, respectively, for the RSAs.

Stock-Based Compensation Expense

Total non-cash stock-based compensation expense recorded related to options granted and restricted stock awards included in the Company's unaudited condensed consolidated statements of operations for the three months ended March 31, 2025 and 2024 are as follows (rounded in millions):

	Three Months Ended March 31,	
	2025	2024
Research and development expenses	\$ 0.2	\$ 0.1
General and administrative expenses	1.1	0.4
Total stock-based compensation expense	<u>\$ 1.3</u>	<u>\$ 0.5</u>

Note 8. Segment Reporting

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources in assessing performance. The Company has one reportable business segment: nuclear fuel technology. This segment consists of the research and development and commercialization of its nuclear fuel. The Company's chief operating decision maker ("CODM") is the chief executive officer.

The accounting policies of the segment are the same as those described in the summary of significant accounting policies. The CODM assesses performance for the segment based on net loss as reported on the condensed consolidated statement of operations. The Company expects to continue to incur significant expenses and operating losses for the foreseeable future as it advances its nuclear fuel through all the stages of its development and commercialization. In addition, the measure of segment assets is reported on the condensed consolidated balance sheet as total assets.

The CODM uses segment net loss to allocate resources predominantly in the annual budget and forecasting process and uses that measure as a basis for evaluating progress toward R&D milestones. The CODM uses cash forecast models in deciding how to invest into the segment. Research and development expenses, general and administrative expenses are included in segment net loss and used to monitor budget versus actual results. Monitoring budgeted versus actual results is used in assessing performance of the segment, while research and development milestones scorecard results and scorecard general and administrative budgeted results are used in establishing management's incentive compensation.

The table below summarizes the significant expense categories regularly provided to the CODM for the three months ended March 31, 2025 and 2024 (rounded in millions):

	Three Months Ended March 31,	
	2025	2024
Revenue	\$ —	\$ —
General and administrative	3.5	2.2
Research and development:		
INL Project	0.8	0.4
Romania feasibility study	—	0.1
Centrus Energy FEED study	—	0.2
Allocated employee compensation and stock-based compensation	0.8	0.2
Other outside R&D expenses	0.1	0.1
Total research and development	1.7	1.0
Other segments items ⁽¹⁾	(0.4)	(0.4)
Net loss	\$ (4.8)	\$ (2.8)

(1) Other segment items include interest income.

Note 9. Subsequent Events

ATM Sales

Sales of common stock under the Company's ATM from April 1, 2025 to May 12, 2025 amounted to 677,300 shares, which resulted in total net proceeds of approximately \$5.0 million.

Issuance of Performance-Based RSAs

On April 3, 2025, the Company's Compensation Committee and Board approved the grant of performance-based RSAs to certain executives, key employees and certain consultants under the 2020 Plan. The awards are subject to both service and performance-based vesting conditions, including achievement of one specific R&D fuel milestone, the insertion of the Company's coupon fuel samples into the ATR reactor at INL for irradiation testing by December 31, 2026. The service requirement for vesting is a three-year period from the grant date.

The Company will recognize stock-based compensation expense for these awards beginning on the grant date, with the amount and timing of expense recognition dependent on the probability of achieving the above performance condition. These 300,000 performance-based restricted stock awards were valued at \$2.1 million, based on the April 7, 2025 closing stock price of \$6.99 per share

2025 Annual Shareholder Meeting Voting Results

At the Company's Annual Meeting of Shareholders held on May 8, 2025, shareholders approved the following proposals:

1. Amendment to the Articles of Incorporation to increase the number of authorized shares of common stock from 25,000,000 shares to 100,000,000 shares.
2. Amendment to the 2020 Plan to increase the number of shares authorized for issuance under the plan from 2,500,000 shares to 5,000,000 shares.

The approved proposal to the Amendment to the Articles of Incorporation became effective upon the filing of the Amended and Restated Certificate of Incorporation with the Secretary of State of Nevada. The Series X Preferred Stock (note 7) was redeemed and the Certificate of Withdrawal was filed with the Secretary of State of Nevada.

FORWARD-LOOKING STATEMENTS

In addition to historical information, this Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. We use words such as “believe,” “expect,” “anticipate,” “project,” “target,” “plan,” “optimistic,” “intend,” “aim,” “will,” “may,” or similar expressions, which are intended to identify forward-looking statements. Such statements include, among others:

- those concerning market and business segment growth, demand, and acceptance of our nuclear fuel technology and other steps toward the commercialization of Lightbridge Fuel™;
- any projections of sales, earnings, revenue, margins, or other financial items;
- any statements of the plans, strategies, and objectives of management for future operations and the timing and outcome of the development of our nuclear fuel technology;
- any statements regarding future economic conditions or performance;
- any statements about future financings and liquidity;
- the Company’s anticipated financial resources and position; and
- all assumptions, expectations, predictions, intentions, or beliefs about future events and other statements that are not historical facts.

You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, as well as assumptions that if they were to ever materialize or prove incorrect, could cause the results of the Company to differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties, among others, include:

- our ability to commercialize our nuclear fuel technology, including risks related to the design and testing of nuclear fuel incorporating our technology and the degree of market adoption of the Company’s product and service offerings;
- dependence on strategic partners;
- any adverse changes to our agreements or relationship with the U.S. government and its national laboratories;
- our ability to fund our future operations, including general corporate overhead and outside research and development (R&D) expenses, and continue as a going concern;
- the future market and demand for our fuel for nuclear reactors and our ability to attract customers;
- our ability to manage the business effectively in a rapidly evolving market;
- our ability to employ and retain qualified employees and consultants that have experience in the nuclear industry;
- competition and competitive factors in the markets in which we compete, including from accident tolerant fuels (ATFs);
- access to and availability of nuclear test reactors and the risks associated with unexpected changes in our nuclear fuel development timeline;
- access to and availability of adequate resources and manufacturing capabilities at national laboratories that affect our nuclear fuel development timeline and project costs;
- the increased costs associated with metallization of our nuclear fuel;

- uncertainties related to conducting business in foreign countries;
- public perception of nuclear energy generally;
- changes in laws, rules, and regulations governing our business;
- changes in the political environment;
- development and utilization of, and challenges to, our intellectual property domestically and abroad;
- the trading price of our securities is likely to be volatile, and purchasers of our securities could incur substantial losses; and
- the other risks and uncertainties identified in Item 1A. Risk Factors included in our Annual Report on Form 10-K for the year ended December 31, 2024.

Most of these factors are beyond our ability to predict or control and you should not put undue reliance on any forward-looking statement. Future events and actual results could differ materially from those set forth in, contemplated by or underlying the forward-looking statements. Forward-looking statements speak only as of the date on which they are made. The Company assumes no obligation and does not intend to update these forward-looking statements for any reason after the date of the filing of this report, to conform these statements to actual results or to changes in our expectations, except as required by law.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations, or MD&A, is intended to help the reader understand Lightbridge Corporation, our operations, and our present business environment. MD&A is provided as a supplement to, and should be read in conjunction with, our unaudited condensed consolidated financial statements and the accompanying notes thereto contained in Part I, Item 1 of this report, as well as those included in our Annual Report on Form 10-K for the year ended December 31, 2024.

This MD&A consists of the following sections:

- Overview of Our Business and Recent Developments of Lightbridge Fuel™ - a general overview of our business and updates;
- Critical Accounting Estimates;
- Operations Review - an analysis of our condensed consolidated results of operations for the periods presented in our condensed consolidated financial statements; and
- Liquidity, Capital Resources, and Financial Position - an analysis of our cash flows and an overview of our financial position.

As discussed in more detail under "Forward-Looking Statements" preceding this MD&A, the following discussion contains forward-looking statements that are based on our management's current expectations, estimates, and projections, which are subject to a number of risks and uncertainties. Our actual results may differ materially from those discussed in these forward-looking statements because of the risks and uncertainties inherent in future events, including those set forth under "Forward-Looking Statements" and Part II. Item 1A. Risk Factors included herein.

OVERVIEW OF OUR BUSINESS AND DEVELOPMENT OF LIGHTBRIDGE FUEL™

When used in this Quarterly Report on Form 10-Q, the terms "Lightbridge," the "Company," "we," "our," and "us" refer to Lightbridge Corporation together with its wholly-owned subsidiaries Lightbridge International Holding LLC and Thorium Power Inc. Lightbridge's principal executive offices are located at 11710 Plaza America Drive, Suite 2000, Reston, Virginia, 20190, USA.

Our Business

At Lightbridge, we are developing next generation nuclear fuel for water-cooled reactors that could significantly improve the economics and safety of existing and new nuclear power plants, large and small, and enhance proliferation resistance of spent nuclear fuel while supplying clean energy to the electric grid or to "behind the meter" customers for electric power, including data centers. We believe that the world's energy and climate needs can only be met if nuclear power's share of the energy-generating mix grows substantially in the coming decades. We believe Lightbridge can benefit from a growing nuclear power industry, and that our nuclear fuel can help enable that growth to happen.

We believe our metallic fuel will offer significant economic and safety benefits over traditional nuclear fuel, primarily because of the superior heat transfer properties and the resulting lower operating temperature of all-metal fuel.

Technology industry companies believe that nuclear energy can offer a strategic, sustainable, and reliable solution for powering data centers. Advances in reactor technology, combined with growing corporate and governmental support for clean energy, can position nuclear power as a cornerstone of future energy strategies for data-intensive industries. We believe that by integrating nuclear power, the data center sector can achieve operational efficiency, energy security, and sustainability. We believe uses of our fuel could include providing additional power via power uprates of existing reactors, which may be willing to pay a premium for reliable, clean, and sustainable baseload electricity. Oil and gas producing companies are investing in low-emission energy technologies to reduce fossil fuel emissions from oil and gas production. Advances in nuclear reactor and fuel technology can position nuclear power as a key energy source for this purpose.

Emerging nuclear technologies include small modular reactors (SMRs), which are now in the development and licensing phases. We expect that Lightbridge Fuel™ can provide water-cooled SMRs with the same benefits our technology brings to large reactors, with such benefits being even more meaningful to the economic case for deployment of SMRs, including potential load following capability when included on a virtually zero-carbon electric grid with renewable energy sources. We expect Lightbridge Fuel™ to enable power uprates in SMRs.

We have built a significant portfolio of patents, and we anticipate testing our nuclear fuel through third-party vendors and others, including the United States Department of Energy's (DOE) national laboratories. Currently, we are performing the majority of our R&D activities within and in collaboration with the DOE's national laboratories.

Recent Developments of Lightbridge Fuel™

Memorandum of Understanding with Oklo, Inc.

In January 2025, we signed a memorandum of understanding (MOU) with Oklo, Inc. Oklo is developing advanced micro-reactors to provide clean, reliable, and affordable energy at scale. The scope of the MOU includes the following areas: (1) to conduct a preliminary evaluation of feasibility of co-locating a Lightbridge Commercial-scale Fuel Fabrication Facility at Oklo's proposed commercial fuel fabrication facility, (2) to explore opportunities for collaboration on reprocessing and recycling of spent uranium zirconium fuel, and (3) to explore any other areas of collaboration that may be of mutual interest. We believe there may be some potential synergies in co-locating our commercial scale fuel fabrication facility at Oklo's proposed site. We also believe recycling and reprocessing spent uranium-zirconium fuel represents another area of potential synergies.

Idaho National Laboratory Agreements

In December 2022, Lightbridge entered into agreements with Battelle Energy Alliance, LLC (BEA), the DOE's operating contractor for Idaho National Laboratory (INL), to support the development of Lightbridge Fuel™. The framework agreements use an innovative structure that consists of an "umbrella" Strategic Partnership Project Agreement (SPPA) and an "umbrella" Cooperative Research and Development Agreement (CRADA), each with BEA, with an initial duration of seven years.

We anticipate that the initial phase of work under the two agreements that has been released will culminate in casting and extrusion of unclad fuel material samples using enriched uranium supplied by the DOE that will subsequently be inserted for irradiation testing in the Advanced Test Reactor (ATR) at INL. The initial phase of work aims to generate irradiation performance data for Lightbridge's delta-phase uranium-zirconium alloy relating to various thermophysical properties. The data will support fuel performance modeling and regulatory licensing efforts for commercial deployment of Lightbridge Fuel™. We use a rolling wave planning approach for project management purposes on the released scopes of work. It is an iterative planning technique in which the work to be accomplished in the near term is planned in detail, while work further in the future is planned at a higher level. As such, periodic revisions to the scope and/or cost estimates are anticipated.

On March 26, 2024 and October 24, 2024, the Company and BEA entered into Modifications No. 2 and No. 3 respectively, to PTS No. 1 under the SPPA, dated December 9, 2022, as amended on May 23, 2023, by and between the Company and BEA. Pursuant to the terms of Modifications No. 2 and No. 3, the potential amounts payable by the Company to reimburse BEA for its expenses and employee time were increased by approximately \$0.6 million and \$0.3 million, respectively, bringing the total estimated cost for the work to be performed under the "umbrella" SPPA to approximately \$2.0 million.

On March 18, 2025, the Company and BEA entered into Modification No. 4 to the PTS No. 1 under the SPPA, dated December 9, 2022, as amended on May 23, 2023, March 26, 2024 and October 24, 2024, by and between the Company and BEA. Pursuant to the terms of Modification No. 4, the potential amounts payable by the Company to reimburse BEA for its expenses and employee time were increased by approximately \$0.6 million, bringing the total estimated cost for the work to be performed under the "umbrella" SPPA to \$2.6 million.

On January 16, 2025 the Company and BEA entered into Modification No. 3 to PTS No. 1 under the CRADA, dated September 27, 2022, as amended on May 22, 2023, May 30, 2023, by and between the Company and BEA. Pursuant to the terms of Modification No. 3, the potential amounts payable by the Company to reimburse BEA for its expenses and employee time were increased from \$2.6 million by approximately \$1.6 million, bringing the total estimated cost for the work to be performed under the "umbrella" CRADA to \$4.2 million. This modification also required that a \$0.6 million advance payment be made, which was paid on January 16, 2025.

After accounting for all modifications, cash payments from Lightbridge to Battelle under both CRADA and SPPA are estimated at approximately \$6.8 million on a cost reimbursable basis over the performance periods.

The Company anticipates entering into additional modifications to the Project Task Statements (PTS) under the SPPA and/or CRADA with INL to expand the scope of work, including performing additional extrusions, updating the experiment design for irradiation testing of coupon samples in the ATR, and other potential activities. The successful execution of this project is subject to risks, including potential delays, cost overruns, regulatory challenges, and changes in funding availability, and if the project scope does increase, then the project will be successfully executed or completed. Regardless of whether further project modifications occur, INL has indicated to the Company that due to resource and manufacturing equipment constraints, INL may not be able to meet the Company's preferred project timeline, and that the total project cost will exceed the current budget.

We anticipate that subsequent phases of work under the two umbrella agreements that have not yet been released may include post-irradiation examination of the irradiated fuel material coupons, loop irradiation testing in the ATR, and post-irradiation examination of one or more uranium-zirconium fuel rodlets, as well as transient experiments in the Transient Reactor Test Facility at INL.

Romania Feasibility Study of Lightbridge Fuel™ for use in CANDU reactors

On October 16, 2023, we engaged Institutul de Cercetări Nucleare Pitești, a subsidiary of Regia Autonomă Tehnologii pentru Energia Nucleară (RATEN ICN) in Romania to perform an engineering study to assess the compatibility and suitability of Lightbridge Fuel™ for use in CANDU reactors. This assessment covers key areas including mechanical design, neutronics analysis, and thermal and thermal-hydraulic evaluations. The findings from this engineering study will play an important role in guiding future economic evaluations and navigating potential regulatory licensing-related issues for potential use of Lightbridge Fuel™ in CANDU reactors.

The results of this Feasibility Study indicated that Lightbridge Fuel™ can double the discharged burnup in a CANDU reactor at U-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 Fuel™ in CANDU reactors.

Nuclear Energy University Program Awards

Texas A&M University (TAMU), NuScale Power, and Structural Integrity Associates are working on a 3-year study of our nuclear fuel, led by TAMU. The TAMU study is expected to be completed in 2026. In mid-2023, TAMU was awarded \$1.0 million by the DOE's Nuclear Energy University Program (NEUP) R&D Awards to conduct this study. The project entails a characterization of the performance of the Lightbridge Fuel™ Helical Cruciform advanced fuel design, which will generate sets of experimental data on friction factor, flow, and heat transfer behavior under NuScale's SMR simulated normal and off-normal conditions.

We previously announced the ongoing NEUP project with the Massachusetts Institute of Technology (MIT). The study led by MIT and funded by DOE relates to evaluation of accident tolerant fuels (ATFs) in various SMRs. The project aims to simulate the fuel and safety performance of Lightbridge Fuel™ for the NuScale SMR and provide scoping analysis to improve the safety and economics of water-cooled SMRs. 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 have shown promising safety and performance benefits for Lightbridge Fuel™. Compared to conventional fuel, Lightbridge Fuel™ demonstrated improved thermal-hydraulic margins, lower operating temperatures, and greater potential for power uprates, which contributes to enhancing reactor economics.

We do not have any performance obligations with the collaboration teams working on the above-mentioned projects and will not receive any revenue or record any economic benefits from these awards.

Future Steps Toward Our Fuel Development and Timeline For The Commercialization of Our Nuclear Fuel Assemblies

We anticipate fuel development milestones for Lightbridge Fuel™ over the next 2-3 years will consist of the following:

- **INL:** To produce samples, coupons, and rodlets necessary for testing to be performed under our INL agreements. We will continue to execute the SPPA/CRADA work at INL leading to casting and extrusion of fuel material samples using enriched uranium and their subsequent insertion for irradiation testing in the ATR.
- **Modeling:** Continue development and/or validation (benchmarking) of Lightbridge-specific methods and modifications to existing modeling codes to accurately predict Lightbridge Fuel™ performance over the full domain of operating conditions for which Lightbridge Fuel™ will be licensed.
- **Fuel Qualification Plan:** Develop a Fuel Qualification Plan that describes our approach to characterizing and validating the performance our fuel rods, assemblies, and assembly components in relevant operation scenarios, and validation of the modeling tools that accurately describe the performance of Lightbridge Fuel™ in the relevant conditions.
- **NRC Engagement Plan:** Prepare and submit the Nuclear Regulatory Commission (NRC) Engagement Plan that outlines how and when Lightbridge will engage the NRC regarding submission of relevant information and supporting documentation for license applications.
- **Fabrication:** Continue manufacturing efforts relating to establishing a manufacturing process for the co-extrusion of clad rodlets for loop irradiation testing and other fuel testing. In addition, we plan to complete site selection and begin deployment of a Lightbridge Pilot Fuel Fabrication Facility (LPFFF) with capacity to produce fuel samples, fuel coupons, fuel rodlets, and full-length fuel rods for lead test rods and lead test assemblies for demonstration of our fuel in commercial reactors.
- **Thermal-Hydraulic Analysis and Experiments:** Perform thermal-hydraulic modeling of Lightbridge Fuel™ to prepare for a series of thermal-hydraulic experiments to confirm pressure drop, critical heat flux performance, and other thermal-hydraulic parameters of Lightbridge Fuel™ under various operating conditions in different types of reactors.

The long-term milestones towards development and commercialization of nuclear fuel assemblies include, among other things, irradiating nuclear material samples and prototype fuel rods with enriched uranium in test reactors, conducting post-irradiation examination of irradiated material samples and/or prototype fuel rods, performing thermal-hydraulic experiments, performing seismic and other out-of-reactor experiments, performing advanced computer modeling and simulations to support fuel qualification, designing a lead test assembly (LTA), entering into a lead test rod/assembly agreement(s) with a host reactor(s), demonstrating the production process of lead test rods and/or lead test assemblies at a pilot-scale fuel fabrication facility and demonstrating the operation of lead test rods and/or lead test assemblies in commercial reactors.

The above future steps describe our current proposed approach to deploying Lightbridge Fuel™ in CANDU and/or U.S. pressurized water reactors (PWRs).

There are inherent uncertainties in the cost and outcomes of the many steps needed for successful deployment of our fuel in commercial nuclear reactors, which makes it difficult to accurately predict the timing of the commercialization of our nuclear fuel technology. However, based on our best estimate and assuming adequate R&D funding levels, we expect to begin demonstration of lead test rods and/or possibly LTAs with our metallic fuel in commercial reactors in the 2030s and begin receiving purchase orders for initial fuel reload batches from utilities 15-20 years from now, with deployment of our nuclear fuel in the first reload batch in a commercial reactor taking place approximately two years thereafter. We are exploring ways of shortening this timeframe that may include securing access to expanded irradiation test loop capacity in existing or new research reactor facilities. Lightbridge aims to engage early with relevant nuclear regulators to inform our future R&D activities.

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make a variety of estimates and assumptions that affect (i) the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and (ii) the reported amounts of revenues and expenses during the reporting periods covered by the financial statements. For a discussion of the accounting judgments and estimates that we have identified as critical in the preparation of our financial statements, please see “Critical Accounting Estimates” under Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the year ended December 31, 2024, filed with the SEC on March 3, 2025. There have been no significant changes in our critical accounting policies and estimates during the three months ended March 31, 2025.

Our management expects to make judgments and estimates about the effect of matters that are inherently uncertain. As the number of variables and assumptions affecting the future resolution of the uncertainties increase, these judgments become even more subjective and complex. Although we believe that our estimates and assumptions are reasonable, actual results may differ significantly from these estimates. Changes in estimates and assumptions based upon actual results may have a material impact on our results of operations and/or financial condition.

OPERATIONS REVIEW

Financial information is included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Condensed Consolidated Results of Operations - Three Months Ended March 31, 2025 and 2024

The following table presents our historical operating results and the change in amounts for the periods indicated (rounded to millions):

	Three Months Ended March 31,		Increase (Decrease) Change \$	Increase (Decrease) Change %
	2025	2024		
Operating Expenses				
General and administrative	\$ 3.5	\$ 2.2	\$ 1.3	59%
Research and development	\$ 1.7	\$ 1.0	\$ 0.7	70%
Total Operating Expenses	\$ 5.2	\$ 3.2	\$ 2.0	63%
Operating Loss	\$ (5.2)	\$ (3.2)	\$ 2.0	63%
Other Income	\$ 0.4	\$ 0.4	\$ —	—%
Net loss before Income Taxes	\$ (4.8)	\$ (2.8)	\$ 2.0	71%
Net Loss	\$ (4.8)	\$ (2.8)	\$ 2.0	71%

Operating Expenses**General and Administrative**

General and administrative expenses consist mostly of compensation and related costs for personnel and facilities, stock-based compensation, finance, human resources, information technology, fees for consulting and other professional services. Professional services are principally comprised of legal, audit, strategic advisory services, and outsourcing services.

General and administrative expenses increased by \$1.3 million for the three months ended March 31, 2025, as compared to the three months ended March 31, 2024. The increase primarily consisted of an increase in employee compensation and employee benefits of \$0.2 million, an increase in consulting fees of \$0.1 million, an increase in professional fees of \$0.4 million, and an increase in stock-based compensation of \$0.7 million primarily due to the accelerated vesting of RSAs issued to a former employee of \$0.5 million, partially offset by a decrease in information technology and recruitment expenses of \$0.1 million.

Total stock-based compensation included in general and administrative expenses was \$1.1 million and \$0.4 million for three months ended March 31, 2025 and March 31, 2024, respectively.

Research and Development

R&D expenses consist primarily of costs associated with our CRADA and SPPA agreements with INL, employee compensation and related fringe benefits including stock-based compensation and other R&D costs for the development of our Lightbridge Fuel™.

The following table presents our total R&D expenses, including internal costs and other outside R&D costs, for the three months ended March 31, 2025 and 2024 (rounded to millions):

	Three Months Ended March 31,	
	2025	2024
INL Project	\$ 0.8	\$ 0.4
Romania Feasibility Study	—	0.1
Centrus Energy FEED Study	—	0.2
Allocated employee compensation and stock-based compensation expenses	0.8	0.2
Other outside R&D expenses	0.1	0.1
Total	<u>\$ 1.7</u>	<u>\$ 1.0</u>

R&D expenses increased by \$0.7 million for the three months ended March 31, 2025, as compared to the three months ended March 31, 2024, 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 \$0.4 million, and an increase in allocated employee compensation and employee benefits and stock-based compensation expenses of \$0.6 million, partially offset by a decrease in R&D expenses of \$0.3 million due to two completed R&D studies in 2024.

Total stock-based compensation included in research and development expenses was \$0.2 million and \$0.1 million for the three months ended March 31, 2025 and 2024, respectively.

We currently anticipate investing approximately \$17.0 million in the R&D of our nuclear fuel for the full year 2025. This future budgeted R&D spending for the next 12 months is uncertain and actual spending may differ.

Due to the nature of our R&D expenditures, future costs and schedule estimates are inherently uncertain and can vary significantly as new information and the outcome of these R&D activities become available. Our future business operations are dependent on budgetary constraints due primarily to market conditions and the uncertainty of future liquidity and capital resources available to us to conduct our future R&D activities.

Other Income

The Company's other income, consisting of interest income earned from the purchase of treasury bills and from our bank savings account for the three months ended March 31, 2025, was relatively constant, as compared to the three months ended March 31, 2024.

LIQUIDITY, CAPITAL RESOURCES AND FINANCIAL POSITION

Liquidity Outlook

We measure liquidity in terms of our ability to fund the cash requirements of our R&D activities and our general and administrative expenses, including our contractual obligations and other commitments. We believe that based on our current level of operating expenses and currently available cash resources, we will have sufficient funds available to cover our business activities and operating cash needs for the next 12 months. In order to meet these long-term cash requirements for future planned operations to develop and commercialize our nuclear fuel, including any additional expenditures that may result from unexpected developments, it will be necessary for our project to receive direct or indirect funding and/or in-kind support from government and/or strategic partners and/or other third-party sources.

At March 31, 2025, we had cash and cash equivalents of \$56.9 million, as compared to \$40.0 million at December 31, 2024, an increase of \$16.9 million. We raised net proceeds of \$20.2 million from the sale of approximately 2.6 million shares of common stock for the three months ended March 31, 2025. Our net cash used in operating activities for the three months ended March 31, 2025, was \$3.3 million and our cash flow projections indicate that we will have continued negative cash flows for the foreseeable future. We currently do not anticipate any incoming cash flows, other than the sale of common stock through our at-the-market (ATM) offering. We are not profitable, and we cannot provide any assurance that we will become profitable in the future. We will continue to incur losses because we are in the early R&D development stage of our nuclear fuel.

To complete the development and commercial deployment of Lightbridge Fuel™ we currently estimate a total R&D, including capital expenditures investment in the range of \$200 million to \$300 million or approximately \$20.0 million per year over the next 10-15 years. We plan to raise this capital through a combination of strategic and financial investors, as well as potentially receiving grants from the DOE and/or other government sources.

Sufficient funding is needed to continue our nuclear fuel development project and to achieve our future R&D milestones leading to the commercialization of our nuclear fuel. The actual amount of cash we will need to reach the commercialization of our nuclear fuel is subject to many factors, including, but not limited to, the timing, design and conduct of the R&D work at the DOE's national laboratories for our fuel along with other costs to commercialize our nuclear fuel. Accordingly, there is high potential for budget variances in the current above cost projections and fuel development timelines of our current planned operations over the above cited fuel development period. Currently, we plan to continue to utilize our ATM to finance our future R&D and general and administrative activities.

We will also need to receive substantial funding and in-kind support from government, strategic partners and/or other third-party sources throughout our nuclear fuel R&D development period in order to fund our ongoing R&D efforts in the future. If we are unable to obtain such funding and/or in-kind support that meets our future R&D cash requirements, we will need to seek other funding, which may include the issuance of additional shares of the Company's common stock, if available. This will result in dilution to our existing stockholders. If we can raise additional funds through the issuance of preferred stock, other equity or convertible securities, these securities could have rights or preferences senior to those of our common stock and could contain covenants that restrict our operations in the future. There can be no assurance that we will be able to obtain additional equity or debt financing on terms acceptable to us, if at all.

We have approximately \$61 million of working capital as of the date of this filing and this amount exceeds our anticipated cash requirements for the next 12 months. We currently project a negative cash flow from our operations from both our general and administrative and R&D expenses, resulting in total expected expenditures of approximately \$25.0 million for the full year 2025. Our R&D expenses are expected to increase over the next 12 months as we continue advancing our nuclear fuel development program. There are inherent uncertainties in forecasting the R&D and other expenditures that will be required in the future. We may also be unsuccessful in raising the capital necessary in the future to continue the R&D development of our fuel. Once other anticipated agreements are finalized or other future R&D agreements are entered into and the future R&D expenses are known, we expect to incur a significantly higher level of future required R&D expenses to further develop our fuel, resulting in higher negative monthly cash flows from operations in future periods.

Our current source of cash available to us for the next 12 months, in addition to cash and cash equivalents on hand, is the potential funding from equity issuances pursuant to the at-the-market equity offering sales agreement, as amended, with Stifel, Nicolaus & Company, Incorporated. We filed a shelf registration statement on Form S-3 with the Securities and Exchange Commission (SEC) on March 29, 2024, registering the sale of up to \$75.0 million of the Company's securities that was declared effective on April 19, 2024. On May 10, 2024, we filed a prospectus supplement, which was further supplemented on July 19, 2024 and August 9, 2024 (collectively, the "First Prospectus Supplement") pursuant to which we may offer and sell shares of common stock having an aggregate offering price of up to \$12.6 million from time to time, through the ATM. The Company exhausted all sales under the First Prospectus Supplement. On November 22, 2024, we filed a prospectus supplement pursuant to which we may offer and sell shares of common stock having an aggregate offering price of up to \$45.0 million from time to time through the ATM.

Although we expect this ATM offering to continue to be our primary source of working capital for the Company in 2025, there is no assurance that an ATM financing arrangement will be available to us in the future. See Note 7. Stockholders' Equity and Stock-Based Compensation of the Notes to our Unaudited Condensed Consolidated Financial Statements included in Part I. Item 1. *Financial Statements*, of this Quarterly Report on Form 10-Q for information regarding our prior equity financings.

We have no debt or lines of credit, and we have financed our operations to date through the sale of our preferred stock and common stock. Management believes that public or private equity investments may be available in the future; however, adverse market conditions, in our common stock price and trading volume, as well as other factors could substantially impair our ability to raise capital in the future and continue developing our nuclear fuel.

Short-Term and Long-Term Liquidity Sources

Currently, our primary source of liquidity is cash raised from our ATM offering.

As discussed above, we will seek new financing in order to bring us additional sources of capital, depending on the capital market conditions of our common stock. There can be no assurance that these additional sources of capital will be made available on terms acceptable to us, or at all. The primary potential sources of cash that may be available to us are as follows:

- equity or debt investment from third-party investors in Lightbridge;
- collaboration with potential industry partners; and
- strategic investment and/or government funding to support the remaining R&D activities required to continue the development of our fuel products and move them to a commercial stage.

In support of our long-term business with respect to our fuel technology business, we endeavor to create strategic alliances with other parties to support the remaining R&D activities that are required to further enhance and complete the development of our fuel products to a commercial stage. We may be unable to form such strategic alliances on terms acceptable to us or at all.

See Note 7. Stockholders' Equity and Stock-Based Compensation of the Notes to our Unaudited Condensed Consolidated Financial Statements included in Part I. Item 1. *Financial Statements*, of this Quarterly Report on Form 10-Q for information regarding our prior equity financings.

Cash Flow

The following table provides detailed information about our net cash flows for the three months ended March 31, 2025 and 2024 (rounded in millions):

	Three Months Ended March 31,	
	2025	2024
Net Cash Used in Operating Activities	\$ (3.3)	\$ (1.9)
Net Cash Used in Investing Activities	—	—
Net Cash Provided by Financing Activities	20.2	1.2
Net Cash Inflow (Outflow)	<u>\$ 16.9</u>	<u>\$ (0.7)</u>

Operating Activities

Cash used in operating activities increased by \$1.4 million for the three months ended March 31, 2025 as compared to the three months ended March 31, 2024. This increase was primarily due to increased spending on R&D and general and administrative expenses.

Financing Activities

Cash provided by financing activities increased by \$19.0 million for the three months ended March 31, 2025 as compared to the three months ended March 31, 2024. This increase was primarily due to an increase in the net proceeds received from the issuance of common stock under our ATM offering of \$19.0 million and net proceeds from the exercise of stock options of 0.2 million, partially offset by an increase in net share settlement of equity awards for the payment of withholding taxes of \$0.2 million.

Cash provided by our ATM offering was \$20.2 million (sale of approximately 2.6 million common shares) and \$1.2 million (sale of approximately 0.4 million common shares) for the three months ended March 31, 2025 and 2024, respectively.

Inflation

Our business, revenues, and operating results have not been affected in any material way by inflation.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is not required to provide the information required by this Item as it is a “smaller reporting company,” as defined in Rule 12b-2 of the Exchange Act.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the Exchange Act)) that are designed to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is (a) recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms, and (b) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating such controls and procedures, the Company recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives.

Our management, under the supervision and with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of March 31, 2025.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company’s internal control over financial reporting during the first quarter of 2025 that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

PART II-OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may become involved in various lawsuits and legal proceedings, which arise in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. We are currently not aware of any such legal proceedings or claims that we believe, either individually or in the aggregate, will have a material adverse effect on our business, financial condition, or results of operations.

ITEM 1A. RISK FACTORS

There have been no material changes to our risk factors from the risk factors disclosed in our Annual Report on Form 10-K for the year ended December 31, 2024.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES OR USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not Applicable

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable

ITEM 5. OTHER INFORMATION*Trading Arrangements*

The adoption or termination of contracts, instructions or written plans for the purchase or sale of our securities by our Section 16 officers and directors for the three months ended March 31, 2025, each of which is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Exchange Act (a “Rule 10b5-1 Plan”) and was adopted during an open trading window, with no sales commencing under the plan until completion of the required cooling off period under Rule 10b5-1, were as follows:

Name	Title	Action	Date Adopted	Expiration Date	Aggregate # of Securities to be Purchased/Sold
Jesse Funches ⁽¹⁾	Director	Adoption	1/9/2025	4/9/2026	6,250
Mark Tobin ⁽²⁾	Director	Adoption	1/13/2025	6/1/2026	6,000
Sherri Goodman ⁽³⁾	Director	Adoption	1/24/2025	4/24/2026	7,000
Larry Goldman ⁽⁴⁾	Chief Financial Officer	Adoption	3/7/2025	6/8/2026	Indeterminable ⁽⁴⁾

- (1) Jesse Funches, Director, entered into a pre-arranged stock trading plan pursuant to Rule 10b5-1 on January 9, 2025. Mr. Funches’s plan provides for the sale, subject to certain price limits, of up to 6,250 shares of the Company’s common stock in the aggregate. The plan terminates on April 9, 2026, unless terminated sooner in accordance with its terms.
- (2) Mark Tobin, Director, entered into a pre-arranged stock trading plan pursuant to Rule 10b5-1 on January 13, 2025. Mr. Tobin’s plan provides for the sale at market price, of up to 6,000 shares of the Company’s common stock in the aggregate. The plan terminates on June 1, 2026, unless terminated sooner in accordance with its terms.
- (3) Sherri Goodman, Director, entered into a pre-arranged stock trading plan pursuant to Rule 10b5-1 on January 24, 2025. Ms. Goodman’s plan provides for the sale at market price, of up to 7,000 shares of the Company’s common stock in the aggregate. The plan terminates on April 24, 2026, unless terminated sooner in accordance with its terms.
- (4) Larry Goldman, Chief Financial Officer, entered into a pre-arranged stock trading plan pursuant to Rule 10b5-1 on March 7, 2025. Mr. Goldman’s plan covers sales of 140,349 shares of common stock at certain price limits, which includes 54,912 shares subject to future vesting under restricted stock awards and net of any shares withheld to satisfy tax withholding obligations upon vesting. The plan terminates on June 8, 2026, unless terminated sooner in accordance with its terms.

For the three months ended March 31, 2025, no other director or officer of the Company adopted, modified or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K.

ITEM 6. EXHIBITS

EXHIBIT INDEX -

Exhibit Number	Description
3.1	Certificate of Designation of Series X Preferred Stock (incorporated by reference to Exhibit 3.1 to the Form 8-K filed by the Company on March 3, 2025).
3.2	Certificate of Withdrawal of Series X Preferred Stock (incorporated by reference to Exhibit 3.1 to the Form 8-K filed by the Company on May 9, 2025).
3.3*	Articles of Incorporation of the Company, as amended through May 8, 2025.
10.1▲	Modification No. 3 to the Project Task Statement, dated January 16, 2025, under the Cooperative Research and Development Agreement, dated December 9, 2022, by and between Lightbridge Corporation and Battelle Energy Alliance, LLC (incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on January 17, 2025).
10.2*▲	Modification No. 4 to the Project Task Statement, dated March 18, 2025, under the Strategic Partnership Project Agreement, dated December 9, 2022, as amended on May 23, 2023, March 26, 2024 and October 24, 2024, by and between Lightbridge Corporation and Battelle Energy Alliance, LLC.
10.3	Subscription and Investor Representation Agreement, dated February 27, 2025, by and between the Company and the Purchaser (incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on March 3, 2025).
10.4*†	Form of Performance-Based Restricted Stock Award Agreement.
31.1*	Rule 13a-14(a)/15d-14(a) Certification - Principal Executive Officer.
31.2*	Rule 13a-14(a)/15d-14(a) Certification - Principal Financial Officer.
32*	Section 1350 Certifications.
101	Interactive data files pursuant to Rule 405 of Regulation S-T.
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document).
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101).

* Filed or furnished herewith

▲ Certain portions of this Exhibit have been redacted pursuant to Item 601(b)(10)(iv) of Regulation S-K. The Company agrees to furnish supplementally an unredacted copy of this Exhibit to the SEC upon request.

† Management contracts or compensation plans or arrangements in which directors or executive officers participate.

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 thereunto duly authorized.

Date: May 12, 2025

LIGHTBRIDGE CORPORATION

By: /s/ Seth Grae
Name: Seth Grae
Title: President, Chief Executive Officer, and Director
(Principal Executive Officer)

By: /s/ Larry Goldman
Name: Larry Goldman
Title: Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

**ARTICLES OF INCORPORATION
OF
LIGHTBRIDGE CORPORATION**

As amended through May 8, 2025

1. **Name of Corporation.** The name of this corporation is Lightbridge Corporation.

2. **Resident Agent.** The resident agent of this corporation in Nevada is CSC Services Of Nevada, Inc. whose address is 2215-B Renaissance Drive, Las Vegas, Clark County, Nevada 89119.

3. **Purposes; Powers.** The purposes for which the corporation is formed and its powers are:

3.1 To conduct such business as is lawful.

3.2 To purchase, acquire, hold, mortgage, sell, let, lease or otherwise dispose of or deal in real or personal property of every kind, character and description, and to erect, manage, care for, maintain, extend or alter buildings or structures of any kind or character on real property.

3.3 To purchase or otherwise acquire, hold and/or reissue the shares of its capital stock.

3.4 To raise, borrow and secure the payment of money in any lawful manner, including the issue and sale or other disposition of bonds, warrants, debentures, obligations, negotiable and transferable instruments and evidences of indebtedness of all kinds, whether secured by mortgage, pledge, deed of trust, or otherwise, and incur debt in the purchase or acquisition of property, businesses, rights or franchises, or for additional working capital or for any other object connected with its business or affairs, without limit as to amount.

3.5 To enter into, make, perform and carry out contracts of every sort and kind with any person, firm, association, corporation, private, public or municipal or body politic.

3.6 To guarantee any dividends or bonds or contracts or other obligations.

3.7 To have one or more offices or agencies and keep such books of the company outside of Nevada as are not required by law to be kept in Nevada.

4. **Authorized Capital.** The aggregate number of shares that the corporation will have authority to issue is one hundred and ten million (110,000,000), of which one hundred million (100,000,000) shares will be common stock, with a par value of \$0.001 per share, and ten million (10,000,000) shares will be preferred stock, with a par value of \$0.001 per share. This preferred stock may be divided into and issued in series, each of which shall be so designated as to distinguish the shares thereof from the shares of all other series and classes. The board of directors of the corporation is authorized, within any limitations prescribed by law, to fix and determine the designations, qualifications, preferences, limitations and terms of the shares of any series of preferred stock.

5. **Stock Nonassessable.** The capital stock of this corporation shall not be subject to assessment to pay the debts of the corporation, and in this particular the Articles of Incorporation shall not be subject to amendment.

6. **Board of Directors.** The members of the governing board shall be styled "Directors" and their number shall not be less than one (1) nor more than fifteen (15).

7. **Liability of Directors and Officers.** No director or officer shall have personal liability to the corporation or its shareholders for damages for breach of fiduciary duty as a director or officer, but nothing herein shall eliminate or limit the liability of a director or officer for: 7.1 Acts or omissions not in good faith; 7.2 Acts or omissions which involve intentional misconduct, fraud or violation of law; 7.3 Acts or omissions in breach of the director's or officer's duty of loyalty to the corporation or its shareholders; 7.4 Acts or omissions from which the director or officer derived an improper personal benefit; or 7.5 Payment of dividends in violation of law.

8. **Indemnification.** The corporation shall indemnify, to the full extent and in the manner permitted under the laws of Nevada and any other applicable laws, any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that he is or was a director or officer of this corporation or served any other enterprise as a director or officer at the request of this corporation; such right of indemnification shall also be applicable to the executors, administrators and other similar legal representative of any such director or officer. The provisions of this Section shall be deemed to be a contract between the corporation and each director and officer who serves in such capacity at any time while this Section is in effect, and any repeal or modification of this Section shall not affect any rights or obligations then existing with respect to any state of facts then existing or any action, suit or proceeding brought based in whole or in part upon any such state of facts. The foregoing rights of indemnification shall not be deemed exclusive of any other rights to which any director or officer or his legal representative may be entitled apart from the provisions of this Section.

9. **Perpetual Existence.** This corporation shall have perpetual existence.

10. **By-Laws.** The Board of Directors is expressly authorized and empowered to adopt, amend or repeal the By-Laws of this corporation.

SPP No. [REDACTED], PTS-1, Mod 4

MODIFICATION NO. 4 TO
UMBRELLA STRATEGIC PARTNERSHIP PROJECT NO. [REDACTED], PTS-1

PROJECT TASK STATEMENT

No. 1

BETWEEN

Battelle Energy Alliance, LLC
(hereinafter "Contractor" or "BEA")

AND

Lightbridge Corporation
(hereinafter "Sponsor" or "Lightbridge")

3/17/2025

Produce U-Zr Coupons for Capsule Irradiation

This Project Task Statement (PTS) is under the authority and subject to all terms and conditions of Umbrella Strategic Partnership Project Agreement (SPP) No. [REDACTED].

This Modification No. 4 is to increase the Contractor's estimated cost for the work to be performed under this agreement from \$2,003,048.00 to \$2,603,048.00. In addition, this Modification No. 4 provides an update to the fuel development plan with additional extrusion detail.

A. PURPOSE

The fabrication and characterization of specimens is an important component of any irradiation experiment. The development of a casting and extrusion process to create the desired fuel form for this experiment is substantial. The work will include developing a casting process, heat treating billets from the casting process, machining them into a shape suitable for extrusion, developing an extrusion process, heat treating extruded slugs, and characterizing microstructural and compositional features of the final extruded product. Any necessary development work will be done with depleted uranium (DU). After the process is proven successful, it will be repeated with enriched uranium to produce fuel slugs for the related irradiation experiment.

B. SCOPE**Duration of PTS**

The period of performance of this PTS is from [REDACTED]

Technical Objectives

This PTS is focused on the proof of ability to fabricate a delta-phase U-Zr ingot that is suitable for extruding fuel coupon specimen in accordance with Lightbridge fuel specifications. Fabrication test specimen will be made with depleted uranium (DU), irradiation test specimens will be made with enriched uranium. Final fuel coupons will match the requirements specified by previous experiment design documents (e.g., enrichment). Tasks in this PTS cover the following work:

- Casting U-Zr ingot; and characterization of cast ingot

Tasks and Division of Responsibilities

Task 1: Create Fuel Specification to Support Casting

[illegible]

Task 2: Fabrication Mockup

Task 2.1: Extrusion Method Tooling

Task 2.2: Casting Demonstration

[REDACTED]

Task 2.3: Extrusion Demonstration

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

Task 3: Casting of Enriched Ingot

[REDACTED]

Task 4: Fabrication of Enriched Coupon

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

Task 5: Characterization of Ingot & Extruded Products

[REDACTED]

Task 5.1: Microstructural Characterization

[REDACTED]

[REDACTED]

Task 5.2: Thermal Property Assessment

[REDACTED]

[illegible][illegible]

[REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]

PTS-1, Mod 4

[illegible]

Task No.	Task	Contractor Role/Responsibilities	Sponsor's Role
1	Create Specification to Support Casting	[REDACTED]	[REDACTED]
2	Demonstration/ Mockup of Methods	[REDACTED]	[REDACTED]
3	Casting of Ingot	[REDACTED]	[REDACTED]

Task No.	Task	Contractor Role/Responsibilities	Sponsor's Role
4	Extrusion of Coupons	[REDACTED]	[REDACTED]
5	Characterization of Ingot & Extruded Products	[REDACTED]	[REDACTED]

[REDACTED]

Task No.	Do not proceed to:	Until this is completed:
1	Task No. 2.2/2.3	[REDACTED]
2.1	Task 2.3	[REDACTED]
2	Task No. 3	[REDACTED]
3	Task No. 4	[REDACTED]
4	Task No. 5	[REDACTED]

C. ASSUMPTIONS

- [REDACTED]
1. [REDACTED]
- [REDACTED]

- [REDACTED]
[REDACTED]
- [REDACTED]
[REDACTED]

D. TECHNICAL CONTACTS

For Contractor:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

For Sponsor:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

E. PROJECT MANAGEMENT CONTACTS

For Contractor:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

For Sponsor:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

F. COSTS

1. The Contractor estimated cost for the work to be performed under this Agreement is \$2,603,048.00.
2. The Contractor has no obligation to continue or complete performance of the work at a cost in excess of its estimated cost, including any subsequent amendment.
3. The Contractor agrees to provide at least 30 days' notice to the Sponsor if the actual cost to complete performance will exceed its estimated cost.

Payment Terms:

[REDACTED]

[REDACTED]

The Sponsor shall pay the Contractor as follows:

A. Advance Payment. [REDACTED]

B. Monthly Payments. [REDACTED]

1. [REDACTED]

G. FINANCIAL AND PROJECT PERFORMANCE REPORTING

BEA will provide monthly cost and schedule data outputs from INL standard project reporting tools to Sponsor after each end of fiscal year (FY) month processing. A minimum subset of data should include Schedule and Cost Performance Indices, a standard Cost Performance Report with performance measurement baseline (PMB) curve to include EAC/ETC data as well as any variances & associated descriptions/ corrective action plans (this is typically called a "format 5 VAR" or agreed equivalent). Reporting detail shall be provided at the same work break down structure (WBS) level as agreed upon in the project schedule and cost estimate developed by BEA in support of this PTS.

IN WITNESS WHEREOF, the Parties hereto have executed this Project Task Statement Modification No. 4 by their authorized representatives on the dates shown below.

BATTELLE ENERGY ALLIANCE, LLC:

Name: [REDACTED]

Title [REDACTED]

Date: March 18, 2025

Signature: [REDACTED]

LIGHTBRIDGE CORPORATION:

Name: Andrey Mushakov

Title Executive Vice President, Nuclear Ops.

Date: March 18, 2025

Signature: [REDACTED]

**LIGHTBRIDGE CORPORATION
2020 OMNIBUS INCENTIVE PLAN
PERFORMANCE-BASED RESTRICTED STOCK AWARD AGREEMENT**

The Compensation Committee of the Board of Directors (the “**Board**”) of Lightbridge Corporation, a Nevada corporation (the “**Company**”), granted an award of shares of Performance-Based Restricted Stock Awards (the “**Shares**”), under the Lightbridge Corporation 2020 Omnibus Incentive Plan (the “**Plan**”), to the Grantee named below. This Performance-Based Restricted Stock Award Agreement (the “**Agreement**”) evidences the terms of the Company’s grant of the Shares on the terms and subject to the conditions set forth herein and in the Plan. Any capitalized term in this Agreement shall have the meaning assigned to it in this Agreement or in the Plan, as applicable.

A. NOTICE OF GRANT

Name of Grantee:

Number of Shares of Performance-Based Restricted Stock Awards:

Grant Date:

Vesting Condition: Except as provided otherwise in this Agreement or the Plan (including but not limited to Section 10(c) of the Plan which provides for accelerated vesting upon certain terminations in connection with a Change of Control), and subject to Grantee’s continuous Service (as defined below), the Shares shall vest, and the forfeiture provisions set forth in this Agreement shall lapse as follows:

[Insert Vesting Schedule]

B. PERFORMANCE-BASED RESTRICTED STOCK AWARD AGREEMENT

1. Grant of Restricted Stock. Subject to the terms and conditions of this Agreement and the Plan, the Company granted to Grantee the number of Shares set forth in the Notice of Grant, effective on the Grant Date set forth in the Notice of Grant, and subject to the terms and conditions of the Plan, which is incorporated herein by reference.

The Shares will be issued by the Company in book entry form only, in the name of the Grantee. The Grantee agrees that the Shares shall be subject to the restrictions on transfer set forth in Section 2 of this Agreement and the forfeiture provisions set forth in Section 4 of this Agreement. In the event of a conflict between the terms and conditions of the Plan and this Agreement, the terms and conditions of the Plan shall govern.

2. Transfer Restrictions. Grantee shall not sell, transfer, assign, pledge or otherwise encumber or dispose of, by operation of law or otherwise, the Shares, or any interest therein, until such Shares have vested.

3. Vesting; Lapse of Restrictions. Except as provided otherwise in this Agreement and the Plan (including but not limited to Section 10(c) of the Plan which provides for accelerated vesting upon certain terminations in connection with a Change of Control), provided the Compensation Committee determines that the Vesting Condition described in the Notice of Grant has been satisfied, if Grantee has been in continuous service to the Company or another entity the service providers of which are eligible to receive Awards under the Plan from the Grant Date through the third anniversary of the [Grant Date] (the “**Vesting Date**”) as an employee, director, consultant and/or advisor (herein referred to as “**Service**”), the Shares shall vest on the Vesting Date. For the avoidance of doubt, the change in Grantee’s status from one type of service to another, such as from employee to consultant, shall not by itself cause Grantee’s Service to terminate. If the Shares have vested, as soon as practicable after the Vesting Date, the Company will cause the restrictive legends, as set forth in Section 6 of this Agreement, to be removed. Only following the removal of such restrictive legends may the Grantee transfer the Shares (subject to applicable securities law requirements and the Company’s policies and procedures).

4. Termination of Service. If Grantee terminates Service prior to the Vesting Date for any reason, or the Compensation Committee determines that the Vesting Condition has not been satisfied, Grantee shall not be entitled to any Shares, Grantee shall forfeit all of Grantee's right, title and interest in and to the unvested Shares as of the earlier of the date of termination or the date of such determination, and such unvested Shares shall revert to the Company without further consideration or any act or action by Grantee. Section 10(c) of the Plan provides for accelerated vesting with respect to certain terminations in connection with a Change of Control.

5. Leave of Absence. For purposes of the Shares, Service does not terminate when Grantee goes on a *bona fide* employee leave of absence that was approved by the Company or an Affiliate in writing, if the terms of the leave provide for continued Service crediting, or when continued Service crediting is required by applicable law. However, Service will be treated as terminating 90 days after Grantee went on the approved leave, unless Grantee's right to return to active work is guaranteed by law or by a contract. Service terminates in any event when the approved leave ends unless Grantee immediately returns to active Service. The Compensation Committee determines, in its sole discretion, which leaves of absence count for this purpose, and when Service terminates for all purposes under the Plan.

6. Restrictive Legends. The book entry account reflecting the issuance of the Shares in the name of the Grantee shall bear a legend or other notation upon substantially the following terms:

"These shares of stock are subject to forfeiture provisions and restrictions on transfer set forth in a certain Performance-Based Restricted Stock Award Agreement between the corporation and the registered owner of these shares (or his or her predecessor in interest), and such Agreement is available for inspection without charge at the office of the Secretary of the corporation."

7. Rights as Shareholder. Except as otherwise provided in this Agreement, for so long as Grantee is the registered owner of the Shares, Grantee shall have all rights as a shareholder with respect to the Shares, whether vested or unvested, including, without limitation, rights to vote the Shares and act in respect of the Shares at any meeting of shareholders; provided that any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to unvested Shares shall be paid to Grantee only if and when such Shares vest as provided in Section 7(c)(1) of the Plan. If Grantee forfeits any rights he or she may have to the Shares in accordance with Section 4, Grantee shall no longer have any rights as a shareholder with respect to the unvested Shares or any interest therein and Grantee shall no longer be entitled to receive any Unvested Dividends relating to such Shares.

8. Payment of Taxes. No later than 30 days after the Grant Date, Grantee may make an election to be taxed upon such award under Section 83(b) of the Code. Grantee will, no later than the date as of which any amount related to the Shares first becomes includable in Grantee's gross income for federal income tax purposes, pay to the Company, or make other arrangements satisfactory to the Board regarding payment of, any federal, state and local or other income and employment taxes of any kind required by law to be withheld with respect to such amount. The obligations of the Company under this Agreement will be conditional on such payment or arrangements, and the Company, and, where applicable, its Affiliates will, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to Grantee. The withholding requirement may be satisfied, in whole or in part, at the election of the Company, by allowing Grantee to surrender to the Company a number of Shares from this award having a fair market value (valued in the manner determined by (or in a manner approved by) the Company) on the date of withholding equal to the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income), except that, to the extent that the Company is able to retain Shares having a fair market value (determined by, or in a manner approved by, the Company) that exceeds the statutory minimum applicable withholding tax without financial accounting implications or the Company is withholding in a jurisdiction that does not have a statutory minimum withholding tax, the Company may retain such number of Shares (up to the number of Shares having a fair market value equal to the maximum individual statutory rate of tax (determined by, or in a manner approved by, the Company)) as the Company shall determine in its sole discretion to satisfy the applicable tax liability.

9. Effect of Prohibited Transfer. If any transfer of Shares is made or attempted to be made contrary to the terms of this Agreement, the Company shall have the right to disregard such transfer and to terminate this award of Shares as a result of such prohibited transfer. In addition to any other legal or equitable remedies it may have, the Company may enforce its rights to specific performance to the extent permitted by law and may exercise such other equitable remedies then available. The Company may refuse for any purpose to recognize any transferee who receives Shares contrary to the provisions of this Agreement as a holder of the Shares.

10. Investment Representations. The Compensation Committee may require Grantee (or Grantee's estate or heirs) to represent and warrant in writing that the individual is acquiring the Shares for investment purposes and without any present intention to sell or distribute such Shares and to make such other representations as are deemed necessary or appropriate by the Company and its counsel.

11. Continued Service. Neither the grant of the Shares nor this Agreement gives Grantee the right to continue Service with the Company or its Affiliates in any capacity. The Company and its Affiliates reserve the right to terminate Grantee's Service at any time and for any reason not prohibited by law.

12. Governing Law. The validity and construction of this Agreement and the Plan shall be construed in accordance with and governed by the laws of the State of Nevada other than any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of the Plan and this Agreement to the substantive laws of any other jurisdiction.

13. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Company and Grantee and their respective heirs, executors, administrators, legal representatives, successors and assigns.

14. Tax Treatment. Grantee may incur tax liability as a result of the grant of the Shares, the payment of dividend equivalents or the disposition of the Shares upon the vesting of the Shares. Grantee should consult his or her own tax adviser for tax advice.

15. Amendment. The terms and conditions set forth in this Agreement may only be amended by the written consent of the Company and Grantee, except to the extent set forth in the Plan.

16. 2020 Omnibus Incentive Plan. The Shares and payment of dividend equivalents granted hereunder shall be subject to such additional terms and conditions as may be imposed under the terms of the Plan, a copy of which has been provided to Grantee. A copy of the Prospectus for the 2020 Omnibus Incentive Plan shall also be provided to Grantee.

LIGHTBRIDGE CORPORATION

By: _____
Name:
Title:

Certification of Principal Executive Officer

I, Seth Grae, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Lightbridge Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 12, 2025

By: /s/ Seth Grae

Seth Grae

Principal Executive Officer

Certification of Principal Financial Officer

I, Larry Goldman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Lightbridge Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 12, 2025

By: /s/ Larry Goldman

Larry Goldman
Chief Financial Officer
(Principal Financial and Principal Accounting
Officer)

Section 1350 Certifications

STATEMENT FURNISHED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

The undersigned, the Chief Executive Officer and Chief Financial Officer of Lightbridge Corporation, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge on the date hereof:

1. The Quarterly Report on Form 10-Q of Lightbridge Corporation for the quarter ended March 31, 2025, filed on the date hereof with the Securities and Exchange Commission (the Report), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Lightbridge Corporation.

Date: May 12, 2025

By: /s/ Seth Grae

Name: Seth Grae

Title: President, Chief Executive Officer and Director
(Principal Executive Officer)

By: /s/ Larry Goldman

Name: Larry Goldman

Title: Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)