

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: **September 30, 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 October 31, 2025 is as follows:

Class of Securities

Common Stock, \$0.001 par value

Shares Outstanding

32,371,338

LIGHTBRIDGE CORPORATION
FORM 10-Q
SEPTEMBER 30, 2025

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

LIGHTBRIDGE CORPORATION
UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2025	December 31, 2024
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 153,330,134	\$ 39,990,827
Prepaid expenses and other current assets	1,293,501	324,378
Total Current Assets	154,623,635	40,315,205
Other Assets		
Prepaid project costs and other long-term assets	327,148	528,805
Trademarks	114,982	108,865
Total Assets	<u>\$ 155,065,765</u>	<u>\$ 40,952,875</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 1,560,097	\$ 424,585
Total Current Liabilities	1,560,097	424,585
Commitments and contingencies - Note 5		
Stockholders' Equity		
Preferred stock, \$0.001 par value, 10,000,000 authorized shares, no shares issued and outstanding at September 30, 2025 and December 31, 2024	—	—
Common stock, \$0.001 par value, 100,000,000 authorized, 30,384,981 shares and 18,783,912 shares issued and outstanding at September 30, 2025 and December 31, 2024, respectively	30,385	18,784
Additional paid-in capital	330,050,816	204,694,348
Accumulated deficit	(176,575,533)	(164,184,842)
Total Stockholders' Equity	153,505,668	40,528,290
Total Liabilities and Stockholders' Equity	<u>\$ 155,065,765</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 September 30,		Nine Months Ended September 30,	
	2025	2024	2025	2024
Operating Expenses				
General and administrative	\$ 3,164,343	\$ 1,676,209	\$ 9,146,989	\$ 5,626,567
Research and development	2,039,857	1,298,601	5,345,635	3,232,036
Total Operating Expenses	5,204,200	2,974,810	14,492,624	8,858,603
Operating Loss	(5,204,200)	(2,974,810)	(14,492,624)	(8,858,603)
Other Income				
Interest income	1,104,955	318,649	2,101,933	1,008,224
Total Other Income	1,104,955	318,649	2,101,933	1,008,224
Net Loss Before Income Taxes	(4,099,245)	(2,656,161)	(12,390,691)	(7,850,379)
Income taxes	—	—	—	—
Net Loss	<u>\$ (4,099,245)</u>	<u>\$ (2,656,161)</u>	<u>\$ (12,390,691)</u>	<u>\$ (7,850,379)</u>
Net Loss Per Common Share				
Basic and diluted	\$ (0.16)	\$ (0.19)	\$ (0.55)	\$ (0.57)
Weighted Average Number of Common Shares Outstanding				
Basic and diluted	25,624,598	14,189,787	22,498,638	13,871,756

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 AND NINE MONTHS ENDED SEPTEMBER 30, 2025

	Common Stock		Additional	Accumulated	Total
	Shares	Amount	Paid-in	Deficit	Stockholders'
			Capital		Equity
Balance – June 30, 2025	25,545,488	\$ 25,545	\$ 270,225,336	\$ (172,476,288)	\$ 97,774,593
Issuance of restricted share awards	1,110,000	1,110	(1,110)	—	—
Shares issued - registered offerings - net of offering costs and commissions of \$1,986,689	3,612,403	3,613	57,324,913	—	57,328,526
Shares issued to consultants and directors for services	20,949	21	314,979	—	315,000
Shares issued through the exercise of options	96,141	96	610,323	—	610,419
Stock-based compensation	—	—	1,576,375	—	1,576,375
Net loss for the three months ended September 30, 2025	—	—	—	(4,099,245)	(4,099,245)
Balance – September 30, 2025	<u>30,384,981</u>	<u>\$ 30,385</u>	<u>\$ 330,050,816</u>	<u>\$ (176,575,533)</u>	<u>\$ 153,505,668</u>

	Common Stock		Additional	Accumulated	Total
	Shares	Amount	Paid-in	Deficit	Stockholders'
			Capital		Equity
Balance - December 31, 2024	18,783,912	\$ 18,784	\$ 204,694,348	\$ (164,184,842)	\$ 40,528,290
Issuance of restricted share awards	1,467,940	1,468	(1,468)	—	—
Net share settlement for withholding taxes paid upon vesting of restricted stock awards	(29,440)	(29)	(234,592)	—	(234,621)
Shares issued - registered offerings - net of offering costs and commissions of \$4,207,920	9,854,669	9,854	120,441,594	—	120,451,448
Shares issued to consultants and directors for services	112,045	112	344,888	—	345,000
Shares issued through the exercise of options	195,855	196	1,243,598	—	1,243,794
Stock-based compensation	—	—	3,562,448	—	3,562,448
Net loss for the nine months ended September 30, 2025	—	—	—	(12,390,691)	(12,390,691)
Balance – September 30, 2025	<u>30,384,981</u>	<u>\$ 30,385</u>	<u>\$ 330,050,816</u>	<u>\$ (176,575,533)</u>	<u>\$ 153,505,668</u>

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 AND NINE MONTHS ENDED SEPTEMBER 30, 2024

	Common Stock		Additional	Accumulated	Total
	Shares	Amount	Paid-in	Deficit	Stockholders'
			Capital		Equity
Balance - June 30, 2024	14,591,477	\$ 14,591	\$ 184,599,393	\$ (157,591,994)	\$ 27,021,990
Shares issued - registered offerings - net of offering costs and commissions of \$123,694	608,690	609	1,511,132	—	1,511,741
Shares issued to consultants for services	76,164	76	194,924	—	195,000
Stock-based compensation	—	—	388,477	—	388,477
Net loss for the three months ended September 30, 2024	—	—	—	(2,656,161)	(2,656,161)
Balance – September 30, 2024	<u>15,276,331</u>	<u>\$ 15,276</u>	<u>\$ 186,693,926</u>	<u>\$ (160,248,155)</u>	<u>\$ 26,461,047</u>

	Common Stock		Additional	Accumulated	Total
	Shares	Amount	Paid-in	Deficit	Stockholders'
			Capital		Equity
Balance - December 31, 2023	13,698,274	\$ 13,698	\$ 181,295,125	\$ (152,397,776)	\$ 28,911,047
Shares issued - registered offerings - net of offering costs and commissions of \$421,657	1,436,821	1,437	3,714,928	—	3,716,365
Shares issued to consultants and directors for services	145,370	145	464,855	—	465,000
Net share settlement for withholding taxes paid upon vesting of restricted stock awards	(4,134)	(4)	(10,579)	—	(10,583)
Stock-based compensation	—	—	1,229,597	—	1,229,597
Net loss for the nine months ended September 30, 2024	—	—	—	(7,850,379)	(7,850,379)
Balance – September 30, 2024	<u>15,276,331</u>	<u>\$ 15,276</u>	<u>\$ 186,693,926</u>	<u>\$ (160,248,155)</u>	<u>\$ 26,461,047</u>

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

LIGHTBRIDGE CORPORATION
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Nine Months Ended September 30,	
	2025	2024
Operating Activities		
Net Loss	\$ (12,390,691)	\$ (7,850,379)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	3,746,642	1,280,403
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(808,317)	(37,665)
Prepaid project costs and other long-term assets	201,657	10,125
Accounts payable and accrued liabilities	1,135,512	928,240
Net Cash Used in Operating Activities	<u>(8,115,197)</u>	<u>(5,669,276)</u>
Investing Activities		
Trademarks	(6,117)	—
Net Cash Used in Investing Activities	<u>(6,117)</u>	<u>—</u>
Financing Activities		
Gross proceeds from the issuances of common stock under the ATM program	124,659,368	4,138,022
Payment of offering costs and commissions	(4,207,920)	(421,657)
Net proceeds from the exercise of stock options	1,243,794	—
Payments for taxes related to net share settlement of equity awards	(234,621)	(10,583)
Net Cash Provided by Financing Activities	<u>121,460,621</u>	<u>3,705,782</u>
Net Increase (Decrease) in Cash and Cash Equivalents	113,339,307	(1,963,494)
Cash and Cash Equivalents, Beginning of Period	39,990,827	28,598,445
Cash and Cash Equivalents, End of Period	<u>\$ 153,330,134</u>	<u>\$ 26,634,951</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
Common stock issued for prepaid consulting services	\$ 300,000	\$ 180,000

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 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 Company’s 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 and nine-month periods have been made. Results for the interim periods 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 requires judgment and may have affected the placement within the fair value hierarchy levels.

At period-end, the Company evaluates U.S. Treasury instruments held to determine whether they are:

- “On-the-run”: Securities from the most recent auction with active market pricing, classified as Level 1
- “Off-the-run”: Securities from prior auctions with observable inputs but less liquidity, classified as Level 2

Although U.S. Treasury instruments held as cash equivalents have short maturities (typically 30–90 days) and cost closely approximates fair value, fair value disclosures are presented in accordance with ASC 820 and ASC 320 guidance.

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 U.S. Treasury instruments having maturity dates of 30 to 90 days. The Company purchased \$116.7 million of U.S. Treasury instruments during the nine months ended September 30, 2025.

The following table summarized the valuation of the Company's financial instruments that fell within the fair value hierarchy (rounded in millions) at September 30, 2025:

	Level I	Level II	Level III
Cash and cash equivalents	\$ 56.6	\$ 96.7	\$ —
Accounts payable and accrued liabilities	\$ 1.6	\$ —	\$ —

The following table summarized the valuation of the Company's financial instruments that fell within the fair value hierarchy (rounded 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's cash and cash equivalents are sufficient to pay for the Company's research and development (R&D) and operations for the next year. However, given the long-term nature of the R&D activities that are expected to be necessary prior to commercialization, 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 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, 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 R&D activities to advance its nuclear fuel technology at Idaho National Laboratory (INL). For the three and nine months ended September 30, 2025, R&D expenses associated with activities conducted at INL accounted for 41% and 45% of the Company's total R&D expenditure, respectively. For the three and nine months ended September 30, 2024, R&D expenses associated with activities conducted at the INL accounted for 32% and 36% of the Company's total R&D expenditure, respectively. 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

Accounting Standards Update (ASU) No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, was issued by the Financial Accounting Standards Board (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 is currently evaluating the impact of the adoption of this guidance on its consolidated financial statements and 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 requires 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 Company is currently evaluating the impact of the adoption of this guidance on its consolidated financial statements and related disclosures.

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 and nine months ended September 30, 2025 and 2024, as they would have been anti-dilutive due to the Company's losses at September 30, 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 and Nine Months Ended September 30,	
	2025	2024
Stock options outstanding	263,630	547,362
Restricted stock awards (RSAs) outstanding	2,113,036	545,992
Total	<u>2,376,666</u>	<u>1,093,354</u>

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

In 2022, the Company entered into two agreements with 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 a total of \$0.5 million.

As of September 30, 2025, and December 31, 2024, the Company's prepaid project costs were \$0.3 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):

	September 30, 2025	December 31, 2024
Trade payables	\$ 0.5	\$ 0.2
Accrued research and development expenses	—	0.1
Accrued bonus	0.9	—
Accrued professional and consulting fees	0.2	0.1
Total	<u>\$ 1.6</u>	<u>\$ 0.4</u>

Note 5. Commitments and Contingencies***Operating 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 \$24,000. Total rent expense for the three and nine months ended September 30, 2025 was approximately \$25,000 and \$75,000, respectively. Total rent expense for the three and nine months ended September 30, 2024 was approximately \$24,000 and \$73,000, respectively.

Note 6. Research and Development Costs***INL 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 (ATR) 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 and nine months ended September 30, 2025, the Company recorded \$0.8 million and \$2.4 million in R&D expenses associated with INL, respectively. For the three and nine months ended September 30, 2024, the Company recorded \$0.4 million and \$1.1 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.

On October 6, 2025, the Company and BEA entered into Modification No. 3 to the SPPA extending the duration of this umbrella agreement from 7 years to 12 years. On November 5, 2025, the Company and BEA entered into Modification No. 1 to the CRADA with INL, extending the period of performance from September 27, 2029 to September 27, 2032.

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. The balance of the PTS obligations as of September 30, 2025 was \$2.0 million. These PTS 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 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 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 and nine months ended September 30, 2025, the Company recorded \$0 million in R&D expenses associated with RATEN ICN feasibility study. For the three and nine months ended September 30, 2024, the Company recorded zero 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 that was completed in 2024 and has no further obligations under the agreement. For the three and nine months ended September 30, 2025, the Company recorded \$0 million in R&D expenses associated with this FEED study. For the three and nine months ended September 30, 2024, the Company recorded \$0.1 million and \$0.3 million, respectively in R&D expenses associated with this FEED study.

Note 7. Stockholders' Equity and Stock-Based Compensation

Increase in Authorized Common Shares

On May 8, 2025, the Company held the 2025 annual meeting of stockholders (the Annual Meeting) at which the Company's stockholders approved increasing the authorized common shares from 25,000,000 shares to 100,000,000 shares. 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 on May 8, 2025.

Common Stock and Common Stock Equivalents Outstanding

At September 30, 2025, the Company had a total of 30,648,611 shares of common stock and common stock equivalents outstanding, comprised of 30,384,981 common shares outstanding (including outstanding RSAs totaling 2,113,036 shares) and stock options to purchase 263,630 shares of common stock (of which 250,547 stock options were vested).

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

Issuance and Redemption 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, 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 received by the Company. The Company redeemed the Series X Preferred Stock for \$100 cash after the Annual Meeting and filed the Certificate of Withdrawal with the Secretary of State of Nevada on May 8, 2025. The Series X Preferred Stock did 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 was 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 were 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 voted on such proposal (excluding abstentions, broker non-votes and shares of common stock that were not voted "for" or "against" such proposal). The voting power attributable to the Series X Preferred Stock was disregarded for purposes of determining whether a quorum is present at the Annual Meeting.

Common Stock Equity Offerings

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, pursuant to which the Company issued and sold shares of its common stock from time to time through Stifel as the Company's sales agent. Under this amended agreement, the Company paid Stifel a commission equal to 3.0% of the aggregate gross proceeds of any sales of common stock under the agreement. This agreement was terminated on May 30, 2025. Sales of the Company's common stock through Stifel, were made by any method that is deemed to be an at-the-market (ATM) equity offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended.

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 offered and sold shares of common stock having an aggregate offering price of up to \$12.6 million from time to time through an ATM offering. The Company exhausted all capacity under the First Prospectus Supplement. On November 22, 2024, the Company filed a prospectus supplement (the Second Prospectus Supplement) pursuant to which the Company offered and sold shares of common stock having an aggregate offering price of up to \$45.0 million from time to time through an ATM offering. The Company exhausted all capacity under the Second Prospectus Supplement.

The Company filed a shelf registration statement on Form S-3 (File No. 333-287563) on May 23, 2025 registering the sale of up to \$150.0 million of the Company's securities that was declared effective on June 4, 2025. On June 5, 2025, the Company filed a prospectus supplement (the June Prospectus Supplement) pursuant to which the Company may issue and sell from time to time up to \$75.0 million of its shares of common stock through the Company's new sales agent, Jefferies LLC (Jefferies).

On June 5, 2025, the Company entered into an Open Market Sale AgreementSM (the Sales Agreement) with Jefferies pursuant to which the Company may issue and sell from time to time shares of its common stock through Jefferies as the Company's sales agent. Sales of the Company's common stock through Jefferies, 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, as amended, pursuant to the Company's effective shelf registration statement on Form S-3 (File No. 333-287563), and the base prospectus filed as part of such registration statement and a prospectus supplement.

On September 26, 2025, the Company filed a prospectus supplement (the September Prospectus Supplement) pursuant to which the Company may issue and sell from time to time up to \$75.0 million of its shares of common stock through Jefferies.

The Company records its ATM sales on a settlement date basis. The Company sold 9,854,669 shares under the ATM for the nine months ended September 30, 2025 resulting in net proceeds of \$120.4 million (stock issuance costs were approximately \$4.2 million). The Company sold 1,436,821 shares under the ATM for the nine months ended September 30, 2024 resulting in net proceeds of \$3.7 million (stock issuance costs were approximately \$0.4 million).

For the three months ended September 30, 2025, the Company sold 3,612,403 shares under the ATM, resulting in net proceeds of \$57.3 million (stock issuance costs were approximately \$2.0 million). For the three months ended September 30, 2024, the Company sold 608,690 shares under the ATM, resulting in net proceeds of \$1.5 million (stock issuance costs were approximately \$0.1 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 stockholders 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 annual meeting of stockholders on April 19, 2024.

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 increase was approved by the stockholders at the annual meeting of stockholders on May 8, 2025.

The total number of shares of common stock available for future issuance under the 2020 Plan was 2,008,361 shares and 1,471,026 shares at September 30, 2025 and 2024, respectively.

Stock Options

Stock options issued to the Company's employees, directors and consultants are summarized as follows for the nine months ended September 30, 2025:

	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	12,418	10.33		—
Exercised	(195,855)	6.35		1,834,474
Forfeited	—	—		—
Expired	(17,873)	75.60		—
Outstanding, September 30, 2025	263,630	\$ 19.28	2.35	2,045,064
Vested and expected to vest, end of the period	263,630	\$ 19.28	2.35	2,045,064
Options exercisable, end of the period	250,547	\$ 20.04	2.01	\$ 1,829,575

For the nine months ended September 30, 2025 and 2024, the Company issued 12,418 and 71,330 stock options, respectively, to two consultants. The 12,418 stock options and the 71,330 stock options were assigned a fair value of \$6.85 per share and \$1.19 per share, respectively (total fair value of \$85,000 for each grant). The weighted-average grant-date exercise price per share of the stock options granted for the nine months ended September 30, 2025 and 2024, was \$10.33 and \$2.91, respectively.

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 \$21.21 per share and \$2.80 per share at September 30, 2025 and 2024, 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 recognizes 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 nine months ended September 30, 2025 and 2024:

	Nine Months Ended September 30,	
	2025	2024
Expected volatility	109.24% - 117.44%	75.36% - 92.89%
Risk free interest rate	3.80% - 3.95%	3.76% - 4.54%
Dividend yield rate	—	—
Expected life	2-6 years	2-6 years
Closing price per share - common stock	\$9.42 - \$15.13	\$2.49 - \$2.62

As of September 30, 2025, total unrecognized compensation cost related to option awards was \$47,813, which is expected to be recognized over a remaining weighted-average vesting period of 2.26 years. As of September 30, 2024, total unrecognized compensation cost related to option awards was \$47,853, which was expected to be recognized over a remaining weighted-average vesting period of 2.26 years.

Exercise of Options

For the three and nine months ended September 30, 2025, the Company received approximately \$0.6 million and \$1.2 million in net proceeds from the exercise of 96,141 and 195,855 stock options by employees and consultants, respectively. There were no options exercised for the nine months ended September 30, 2024.

Common Stock

Consultants' Stock Issuances

For the nine months ended September 30, 2025 and 2024, the Company issued 6,302 shares (with an average stock price of \$7.14 per share) and 13,201 shares (with an average stock price of \$3.41 per share) of common stock, respectively, to its investor relations firm for services provided during the period, which were recorded as stock-based compensation expense. 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 Company issued 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 and fully amortized to stock-based compensation expense in the condensed consolidated statement of operations for the nine months ended September 30, 2025.

On August 29, 2025, the Company issued an equity grant valued at \$300,000 to the same consulting and investment research firm, for corporate advisory services to be provided over a twelve-month period, which resulted in issuing the consultant 19,828 shares of common stock on the grant date, valued at \$15.13 per share. These shares vested immediately upon issuance and are not forfeitable. The compensation cost of \$300,000 began to be recognized on a straight-line basis over the requisite service period. Approximately \$25,000 was recorded to stock-based compensation expense in the condensed consolidated statement of operations for the nine months ended September 30, 2025.

As of September 30, 2025, the unrecognized compensation cost of approximately \$275,000 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 0.92 years.

Restricted Stock Awards (RSAs)

RSAs are awards of common stock that are legally issued and outstanding. RSAs are subject to time-based restrictions on transfer and unvested portions are generally subject to a risk of forfeiture if the award recipient ceases providing services to the Company prior to the lapse of the restrictions or does not meet certain performance conditions.

RSAs were included in common stock issued and outstanding and were considered contingently issuable in the calculation of weighted-average shares outstanding for purposes of calculating diluted loss per share. The grantees receiving RSAs have all rights as a shareholder with respect to these shares, whether vested or unvested, including, without limitation, rights to vote the shares, receive dividends, etc.

The following summarizes the Company's restricted stock award activity and the RSAs 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 (including performance-based RSAs of 1,125,000 shares)	1,467,940	13.50	19,821,822
Awards vested	(136,768)	6.10	1,346,731
Awards forfeited	—	—	—
Outstanding, September 30, 2025	2,113,036	\$ 10.91	\$ 44,817,494

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 \$21.21 per share and \$2.80 per share at September 30, 2025 and 2024, respectively. The fair value of the RSAs vested for the nine months ended September 30, 2025 and 2024 was \$1.3 million and \$0 million, respectively.

As of September 30, 2025, total unrecognized compensation cost related to RSAs was \$20.5 million, which is expected to be recognized over a remaining weighted-average vesting period of 2.57 years. As of September 30, 2024, total unrecognized compensation cost related to RSAs was \$1.45 million, which is expected to be recognized over a remaining weighted-average vesting period of 1.64 years.

August 28, 2025 – Equity Grant of 1,800,000 shares of Restricted Stock Awards Program

On August 28, 2025, the Board of Directors approved an aggregate restricted stock award program of 1.8 million shares of common stock. Pursuant to this approval, on August 28, 2025, the Company granted 1.1 million restricted stock awards with an aggregate grant-date fair value of approximately \$17.1 million to its executives, directors, and employees. These awards consisted of 275,000 RSAs and 825,000 performance-based restricted stock awards (PSAs). The total value of approximately \$17.1 million was based on the Company's closing stock price of \$15.54 per share on the grant date. The remaining portion of the Board-approved program has been authorized for future issuance by management, subject to applicable conditions.

The first tranche of 275,000 RSAs are subject to service-based vesting, with the shares vesting in three equal installments on the first, second and third anniversaries of the date of grant. These shares were included in the total outstanding common shares as of September 30, 2025 due to their voting rights. These awards were valued at approximately \$4.3 million. The Company recognized \$0.1 million in stock-based compensation expense for the three and nine months ended September 30, 2025.

The second tranche of 825,000 PSAs are subject to both service-based and performance-based vesting conditions. The PSAs have three specific R&D fuel milestones relating to key technical development and commercialization objectives of the Company's R&D fuel program and one specific financial milestone vesting in unequal tranches based on which milestone is certified. Each milestone applies only to a separate portion of the 825,000 PSAs. The respective portions of each tranche will vest upon the later of achievement and Board or Compensation Committee certification of operational milestones and is subject to (i) the grantee's continued service through the certification date and (ii) the grantee having completed at least twelve months of continuous service with Lightbridge as of the operational milestone achievement date. The performance period for achieving these operational milestones extend from the grant date to December 31, 2028. Any unvested shares will be forfeited if the corresponding operational and financial milestones are not achieved by December 31, 2028 or if the grantee's service with the Company ends prior to vesting.

As of the grant date and September 30, 2025, management concluded that the performance conditions associated with these performance milestones were probable of achievement. In accordance with ASC 718, the Company applied the graded vesting attribution amortization to the related RSAs from the grant date through each milestone's estimated achievement date. These awards were valued at approximately \$12.8 million. The Company recognized \$0.4 million in stock-based compensation expense for the three and nine months ended September 30, 2025.

April 3, 2025 – Equity Grant of 300,000 Performance-Based Restricted Stock Awards

On April 3, 2025, the Company granted 300,000 PSAs to certain executives, key employees, and consultants under the 2020 Equity Incentive Plan. These awards were valued at approximately \$2.1 million in total, based on the Company's closing stock price of \$6.99 per share on April 7, 2025, which was the final date of communication with the certain executives, key employees and consultants regarding the awards.

These PSAs are subject to both service-based and performance-based vesting conditions. The performance condition requires the successful insertion of the Company's coupon fuel samples into the Advanced Test Reactor at INL by December 31, 2026 and is subject to the grantees continuous service over a three-year period from the grant date.

As of the grant date and September 30, 2025, management concluded that the performance condition was probable of achievement. The Company recognized \$0.4 million in stock-based compensation expense for the three months ended September 30, 2025, and \$0.6 million for the nine months ended September 30, 2025.

Director Compensation - Equity-Settled Awards

On March 12, 2025, the Board of Directors granted 57,940 RSAs to its five independent directors for their service during the year ending December 31, 2025. The awards were valued at \$0.5 million, based on the Company's closing stock price of \$8.63 per share on the grant date.

These RSAs vest in four equal quarterly installments, beginning March 31, 2025. As of September 30, 2025, a total of 43,455 shares had vested. The Company recognized \$0.1 million in stock-based compensation expense for the three months ended September 30, 2025, and \$0.4 million for the nine months ended September 30, 2025.

On December 4, 2024, the Board of Directors approved an equity grant valued at \$500,000 in total to its five independent 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 independent 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.

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 Modification and Net Share Settlements for Payments of Withholding Taxes

In March 2025, the Company accelerated the vesting of 70,710 RSAs in connection with a separation agreement with a former employee, resulting in approximately \$0.5 million of stock-based compensation expense, including \$0.3 million of incremental fair value. This expense was recognized in the first quarter of 2025 and is included in the results for the nine-month period ended September 30, 2025.

RSAs Summary - 2025 and 2024

As of September 30, 2025 and December 31, 2024, the Company had 2,113,036 shares (including performance-based RSAs of 1,125,000 shares) and 781,864 shares (including performance-based RSAs of 0 share) of RSAs, respectively, included in its total issued and outstanding common stock

For the nine months ended September 30, 2025 and 2024, the Company recorded \$3.2 million and \$1.1 million, respectively, in stock-based compensation expense related to RSAs granted. For the three months ended September 30, 2025 and 2024, the Company recorded \$1.6 million and \$0.4 million, respectively, in stock-based compensation expense related to RSAs granted.

Stock-Based Compensation Expense

Total non-cash stock-based compensation expense recorded related to options and RSAs included in the Company's unaudited condensed consolidated statements of operations for the three and nine months ended September 30, 2025 and 2024 are as follows (rounded in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2025	2024	2025	2024
Research and development expenses	\$ 0.5	\$ 0.1	\$ 0.9	\$ 0.2
General and administrative expenses	1.1	0.3	2.7	1.0
Total stock-based compensation expense	<u>\$ 1.6</u>	<u>\$ 0.4</u>	<u>\$ 3.6</u>	<u>\$ 1.2</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 (CODM), 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 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. R&D expenses, general and administrative (G&A) 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 R&D milestones scorecard results and scorecard G&A 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 and nine months ended September 30, 2025 and 2024 (rounded in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2025	2024	2025	2024
Revenue	\$ —	\$ —	\$ —	\$ —
General and administrative	3.2	1.7	9.2	5.6
Research and development				
INL project	0.8	0.4	2.4	1.1
Romania feasibility study	—	—	—	0.1
Centrus Energy FEED study	—	0.1	—	0.3
Allocated employee compensation and stock-based compensation	0.9	0.5	2.3	1.2
Other outside R&D expenses	0.3	0.3	0.6	0.5
Total research and development	\$ 2.0	\$ 1.3	\$ 5.3	\$ 3.2
Other segments items ⁽¹⁾	(1.1)	(0.3)	(2.1)	(1.0)
Net loss	\$ (4.1)	\$ (2.7)	\$ (12.4)	\$ (7.8)

(1) Other segment items include interest income.

Note 9. Subsequent Events

ATM Sales

Sales of common stock under the Company's ATM from October 1, 2025 to November 6, 2025 amounted to 1,891,613 shares, which resulted in total net proceeds of approximately \$42.0 million, stock issuance costs were approximately \$1.3 million.

Safety Analysis Code Development Agreement

On October 27, 2025, Lightbridge Corporation entered into an Agreement for Safety Analysis Codes and Services for Lightbridge Fuel Designs with Numerical Advisory Solutions, LLC ("NAS"). Under the agreement, NAS will develop customized safety-analysis computer codes, models, and documentation to evaluate Lightbridge's proprietary metallic uranium-zirconium fuel designs for water-cooled reactors. The firm-fixed-price contract totals approximately \$0.8 million and will commence in the fourth quarter of 2025. All deliverables, including related intellectual-property rights, will be owned by Lightbridge.

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,” “can,” “could,” “continue,” “expect,” “estimate,” “future,” “anticipate,” “potential,” “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.

The forward-looking statements are not historical facts, and are based upon our current expectations, beliefs, estimates and projections, and various assumptions, many of which, by their nature, are inherently uncertain and beyond our control. Our expectations, beliefs, estimates, and projections are expressed in good faith and we believe there is a reasonable basis for them. 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;
- our 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;
- 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 and Quarterly Report for the period ended June 30, 2025.

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. on a consolidated basis. Lightbridge's principal executive offices are located at 11710 Plaza America Drive, Suite 2000, Reston, Virginia, 20190, USA.

Our Business and Current Industry Trends

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 needs and climate goals 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 our all-metal fuel.

The increased projected power need for data centers is driving large tech companies to invest in nuclear power, which in turn is driving utilities to seek ways to increase power output of existing nuclear plants and to explore deploying new plants. Data centers will need massive, constant power that nuclear power can provide. 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, which may be willing to pay a premium for reliable, clean, and sustainable baseload electricity. 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. 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.

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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.

Use of Artificial Intelligence Tools

We continue to explore and adopt innovative technologies to enhance our business operations and research capabilities. In this regard, the Company has begun utilizing certain nuclear industry-focused artificial intelligence tools that leverage machine learning and advanced analytics to support information gathering, data analysis, and research workflows related to nuclear fuel development and industry trends.

The Company uses tools to supplement internal analysis and decision-making. While the tool is designed to improve efficiency and support our R&D and market research efforts, it does not replace the professional judgment of our management, engineers, or other technical personnel. The Company does not rely exclusively on AI-generated content or recommendations for any material regulatory submissions, safety decisions, or financial reporting.

Recent Developments of Lightbridge Fuel™

Loading of Capsules Containing Lightbridge Fuel Material Samples for Irradiation Testing

On October 9, 2025 we announced the successful completion of the loading of capsules containing Lightbridge Fuel material samples comprised of enriched uranium-zirconium alloy, recently manufactured at INL, into an experiment assembly. The experiment assembly was inserted into the ATR for irradiation testing in October 2025.

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 may represent 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 the insertion of extruded unclad fuel material samples using enriched uranium supplied by the DOE for irradiation testing in the 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 Project Task Statement (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 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 in May 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.

On October 6, 2025, the Company and BEA entered into Modification No. 3 to the SPPA extending the duration of this umbrella agreement from 7 years to 12 years. On November 5, 2025, the Company and BEA entered into Modification No. 1 to the CRADA with INL, extending the period of performance from September 27, 2029 to September 27, 2032.

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 balance of the obligations as of September 30, 2025 was \$2.0 million. These obligations are generally cancellable with 30 days’ notice and, therefore, are not considered firm commitments.

The Company anticipates entering into additional Project Task Statements and/or modifications to the existing PTS under the SPPA and/or CRADA with INL to expand the scope of work, including performing additional extrusions, creating a detailed plan for post-irradiation examination, reviewing and contributing to Lightbridge’s Fuel Qualification Plan, and other potential activities. The successful execution of this project is subject to increase in project scope and risks, including potential delays, cost overruns, regulatory challenges, and changes in funding availability.

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, transient experiments in the Transient Reactor Test Facility at INL, Fuel Qualification Plan support, safety analysis modeling development and support, as well as fuel thermo-mechanical modeling development and support.

Safety Analysis Code Development Agreement

On October 27, 2025, we entered into an Agreement for Safety Analysis Codes and Services for Lightbridge Fuel Designs with Numerical Advisory Solutions, LLC (“NAS”), a provider of nuclear engineering analysis software. Under the agreement, NAS will perform code-development, benchmarking, and modeling services to support the creation of Lightbridge’s proprietary fuel-safety analysis methods and the adaptation of industry-standard computer codes for the Lightbridge Fuel™ helical-cruciform metallic U-Zr design.

The work scope includes hold-point reviews and deliverable acceptance by Lightbridge with an estimated completion window between October 2026 through January 2027. The total contract value is approximately \$0.8 million, with milestone-based payments. The resulting software and analysis models will be owned by Lightbridge and are expected to strengthen Lightbridge’s internal capability to perform reactor safety analyses in support of future regulatory submissions and commercial fuel demonstrations.

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) to perform an engineering study to assess the compatibility and suitability of Lightbridge Fuel™ for use in Canada Deuterium Uranium (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 and are currently in the process of finalizing the scope of work for the next phase of activities.

In August 2025, we entered into an agreement with RATEN ICN (the 2025 RATEN ICN Agreement) to design and conduct irradiation test(s) for several Lightbridge fuel rodlets, with the objective of irradiating the rodlets to one or more target discharge burnups and subjecting the irradiated rodlets to Post Irradiation Examination. In accordance with the terms of the 2025 RATEN ICN Agreement, the work will occur in two phases: (1) In Phase 1, ICN RATEN will conduct scoping studies to develop preliminary experiment designs, evaluate infrastructure and equipment needs, and obtain cost and schedule estimates for potential new driver fuel; (2) In Phase 2, ICN RATEN will implement refurbishments, procure equipment and driver fuel as needed, finalize experiment design, fabricate and operate the test assembly, and complete post-irradiation examination. Lightbridge will be responsible for supplying experimental fuel rodlets for use in the irradiation tests. The Phase 1 work began in August 2025 at a cost of \$35,000.

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 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:** Produce samples, coupons, and rodlets necessary for testing to be performed under our INL agreements. We will continue to execute the SPFA/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 Expandable Fuel Fabrication Facility 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.

While we continue to target LTAs with our metallic fuel in commercial reactors in the 2030s, there are several potential developments that, if successful, could accelerate our anticipated timelines. These developments include:

- Expedited nuclear fuel testing through advanced modeling and simulation, as well as potential use of accelerated irradiation techniques, such as the use of high-enriched uranium in so called Fission Accelerated Steady-state Test type experiments;
- Early engagement with a strategic partner to establish fabrication infrastructure or a pilot-scale fuel fabrication facility to complete development of the manufacturing process for our fuel rods;
- Streamlined regulatory pathways enabled by pre-submission consultations with the NRC, in part supported by recent legislation such as the ADVANCE Act and longstanding federal initiatives;
- Supportive federal policies originating from recent Executive Orders, which laid groundwork for continued federal prioritization of next-generation nuclear technology and a mandate given to the NRC to shorten regulatory review and approval timelines to 12 months for existing reactors and 18 months for new reactor applications. These initiatives, along with current regulatory and legislative efforts, reinforce a policy environment that may be favorable to an accelerated commercialization pathway for Lightbridge Fuel; and
- Some companies developing advanced reactors have deployed pilot-scale facilities that include buildings with security and infrastructure features similar to what Lightbridge would require. Their success may assist Lightbridge in having more certainty regarding the cost and timing of deploying such a facility.

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 nine months ended September 30, 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 September 30, 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 September 30,		Increase (Decrease) Change \$	Increase (Decrease) Change %
	2025	2024		
Operating Expenses				
General and administrative	\$ 3.2	\$ 1.7	\$ 1.5	88%
Research and development	\$ 2.0	\$ 1.3	\$ 0.7	54%
Total Operating Expenses	\$ 5.2	\$ 3.0	\$ 2.2	73%
Operating Loss	\$ (5.2)	\$ (3.0)	\$ 2.2	73%
Interest income	\$ 1.1	\$ 0.3	\$ 0.8	267%
Net loss before Income Taxes	\$ (4.1)	\$ (2.7)	\$ 1.4	52%
Net Loss	\$ (4.1)	\$ (2.7)	\$ 1.4	52%

Operating Expenses

General and Administrative

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

G&A expenses increased by \$1.5 million for the three months ended September 30, 2025, as compared to the three months ended September 30, 2024. The increase primarily consisted of an increase in professional fees of \$0.6 million, an increase in consulting fees of \$0.1 million, and an increase in stock-based compensation of \$0.8 million. The increase was primarily attributable to an increase in grants of performance-based restricted stock awards (PSAs).

Total stock-based compensation included in G&A expenses was \$1.1 million and \$0.3 million for three months ended September 30, 2025 and September 30, 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 related allocable overhead costs for the R&D of our fuel.

The following table presents our total R&D expenses, including internal costs and other outside R&D costs, for the three months ended September 30, 2025 and 2024 (rounded to millions):

	Three Months Ended September 30,	
	2025	2024
INL Project	\$ 0.8	\$ 0.4
Centrus Energy front-end engineering and design (FEED) study	—	0.1
Allocated employee compensation and stock-based compensation expenses	0.9	0.5
Other R&D expenses	0.3	0.3
Total	<u>\$ 2.0</u>	<u>\$ 1.3</u>

R&D expenses increased by \$0.7 million for the three months ended September 30, 2025, as compared to the three months ended September 30, 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, an increase in allocated employee compensation and stock-based compensation expenses of \$0.4 million and an increase in consulting fees of \$0.1 million, partially offset by a decrease in R&D expenses related to the Centrus Energy FEED study of \$0.1 million, which was completed in 2024, and a decrease in IT expenses of \$0.1 million.

Total stock-based compensation included in research and development expenses was \$0.5 million and \$0.1 million for the three months ended September 30, 2025 and 2024, respectively.

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 long-term 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.

Interest Income

Interest income increased by \$0.8 million for the three months ended September 30, 2025, driven by higher cash balances from our ATM sales. The additional cash generated was deployed in purchasing treasury bills and deposited into bank savings, which collectively yielded greater interest income compared to the same period in 2024.

Condensed Consolidated Results of Operations – Nine Months Ended September 30, 2025 and 2024

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

	Nine Months Ended September 30,		Increase (Decrease) Change \$	Increase (Decrease) Change %
	2025	2024		
Operating Expenses				
General and administrative	\$ 9.2	\$ 5.7	\$ 3.5	61%
Research and development	\$ 5.3	\$ 3.2	\$ 2.1	66%
Total Operating Expenses	\$ 14.5	\$ 8.9	\$ 5.6	63%
Operating Loss	\$ (14.5)	\$ (8.9)	\$ 5.6	63%
Interest Income	\$ 2.1	\$ 1.0	\$ 1.1	110%
Net loss before Income Taxes	\$ (12.4)	\$ (7.9)	\$ 4.5	57%
Net Loss	<u>\$ (12.4)</u>	<u>\$ (7.9)</u>	<u>\$ 4.5</u>	<u>57%</u>

Operating Expenses**General and Administrative**

G&A expenses increased by \$3.5 million for the nine months ended September 30, 2025, as compared to the nine months ended September 30, 2024. The increase primarily consisted of an increase in professional fees of \$1.3 million, an increase in consulting fees of \$0.3 million, an increase in IT services fees of \$0.1 million, an increase in employee compensation and employee benefits of \$0.1 million, and an increase in stock-based compensation of \$1.7 million primarily due to the accelerated vesting of RSAs issued to a former employee of \$0.5 million and an increase in grants of PSAs of \$1.2 million.

Total stock-based compensation included in G&A expenses was \$2.7 million and \$1.0 million for nine months ended September 30, 2025 and September 30, 2024, respectively.

Research and Development

The following table presents our total R&D expenses, including internal costs and other outside R&D costs, for the nine months ended September 30, 2025 and 2024 (rounded to millions):

	Nine Months Ended September 30,	
	2025	2024
INL project	\$ 2.4	\$ 1.1
Romania feasibility study	—	0.1
Centrus Energy FEED study	—	0.3
Allocated employee compensation and stock-based compensation expenses	2.3	1.2
Other R&D expenses	0.6	0.5
Total	<u>\$ 5.3</u>	<u>\$ 3.2</u>

R&D expenses increased by \$2.1 million for the nine months ended September 30, 2025, as compared to the nine months ended September 30, 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 \$1.3 million, an increase in allocated employee compensation and stock-based compensation expenses of \$1.1 million, and an increase in consulting services fees of \$0.1 million included in Other R&D expenses, partially offset by a decrease in R&D expenses related to the Romania feasibility study and Centrus Energy FEED study of \$0.4 million, both of which studies were completed in 2024.

Total stock-based compensation included in research and development expenses was \$0.9 million and \$0.2 million for the nine months ended September 30, 2025 and 2024, respectively.

We currently anticipate investing approximately \$12.0 million in the R&D of our nuclear fuel for the full year 2025. However, this projected spending for 2025 is subject to change and actual expenditures may vary.

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.

Interest Income

Interest income increased by \$1.1 million for the nine months ended September 30, 2025, driven by higher cash balances from our ATM sales. The additional cash generated was deployed in purchasing treasury bills and deposited into bank savings, which collectively yielded greater interest income compared to the same period in 2024.

LIQUIDITY, CAPITAL RESOURCES AND FINANCIAL POSITION**Overview**

We assess our liquidity based on our ability to fund the cash requirements of our R&D activities, G&A expenses, contractual obligations, and other operating needs. Based on our current level of operating expenses and our available cash resources, we believe we have sufficient liquidity to fund our operations and meet our anticipated cash requirements for at least the next 12 months.

Short-Term Liquidity and Capital Resources

As of September 30, 2025, we had cash and cash equivalents of \$153.3 million, compared to \$40.0 million as of December 31, 2024, an increase of \$113.3 million. During the nine months ended September 30, 2025, we raised net proceeds of \$120.4 million from the sale of approximately 9.9 million shares of common stock. Our net cash used in operating activities for the nine months ended September 30, 2025, was \$8.1 million.

We believe that our existing cash and cash equivalents of \$153.3 million as of September 30, 2025, together with any additional sources such as cash flows from potential financing and ATM proceeds will be sufficient to meet our working capital and capital expenditure requirements for at least the next 12 months from the date of this filing. Given the uncertainties inherent in our R&D programs and the industry, we cannot precisely estimate our total cash requirements over the next 12 months. We expect these expenditures to increase over time as we advance the development and potential commercialization of our Lightbridge Fuel™. While we do not anticipate any material incoming cash flows from operations in the near term, we expect to continue funding our business primarily through our ATM equity offering.

Long-Term Liquidity and Capital Requirements

Beyond 12 months, we expect to require additional capital to continue R&D activities over a protracted time period as we advance the development and potential commercialization of our Lightbridge Fuel™.

The actual amount and timing of future capital requirements will depend on several factors, including:

- The scope, timing, and cost of R&D activities conducted at DOE national laboratories.
- The design and execution of future fuel development programs.
- The timing and structure of potential strategic partnerships and collaborations.

There is inherent uncertainty in forecasting future expenditures, and actual costs may vary materially from current estimates.

We plan to raise the required long-term capital through a combination of:

- Additional equity issuances.
- Potential strategic investments from industry partners.
- Government grants and other forms of in-kind or financial support.

Sources of Liquidity

Our current primary source of liquidity is cash on hand and potential proceeds from our ATM equity offering. On June 5, 2025, we entered into an Open Market Sale Agreement with Jefferies LLC (Jefferies) to offer and sell up to \$75.0 million of our common stock, from time to time, pursuant to our effective shelf registration statement on Form S-3 (File No. 333-287563), filed on May 23, 2025, and declared effective on June 4, 2025. Sales under the ATM will be made pursuant to the base prospectus filed as part of the shelf registration and the prospectus supplement filed on September 26, 2025.

Although we expect the ATM offering to remain our primary source of working capital in 2025, there are inherent uncertainties associated with our ability to continue raising capital through the ATM program. These uncertainties include potential declines in our stock price, fluctuations in trading volume, adverse market conditions, or regulatory changes that could limit our access to capital under the current ATM arrangement. In addition, the issuance of additional shares through the ATM may result in significant dilution to existing stockholders, and the potential for such dilution could negatively impact the market price of our common stock. There can be no assurance that the ATM financing will remain available to us on acceptable terms, or at all, when needed. 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 additional information regarding our prior equity financings.

We currently have no debt or lines of credit and have historically funded our operations through the sale of preferred and common stock. Although management believes additional public or private equity investments may be available in the future, adverse market conditions, unfavorable stock price movements, or reduced trading volumes could substantially impair our ability to raise capital when needed.

Liquidity Risks and Uncertainties

We anticipate continued negative cash flows from operations for the foreseeable future. If we are unable to secure adequate funding through equity sales, strategic partnerships, or government support, we may be required to seek additional financing, which could include the issuance of common stock, preferred stock, or convertible securities. Any such future financings may result in dilution to existing stockholders or could impose additional financial or operational restrictions.

Our ability to continue the development of our nuclear fuel and achieve key R&D milestones is dependent on securing sufficient funding and forming strategic partnerships in the future. Failure to obtain adequate funding on acceptable terms in the future could significantly delay or prevent the advancement of our nuclear fuel development program.

Cash Flow

The following table provides detailed information about our net cash flows for the nine months ended September 30, 2025 and 2024 (rounded in millions):

	Nine Months Ended September 30,	
	2025	2024
Net Cash Used in Operating Activities	\$ (8.1)	\$ (5.7)
Net Cash Used in Investing Activities	—	—
Net Cash Provided by Financing Activities	121.4	3.7
Net Increase (Decrease) in Cash and Cash Equivalents	<u>\$ 113.3</u>	<u>\$ (2.0)</u>

Operating Activities

Cash used in operating activities increased by \$2.4 million for the nine months ended September 30, 2025 as compared to the nine months ended September 30, 2024. This increase was primarily due to increased spending on R&D and G&A expenses.

Financing Activities

Cash provided by financing activities increased by \$117.7 million for the nine months ended September 30, 2025 as compared to the nine months ended September 30, 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 \$116.7 million and net proceeds from the exercise of stock options of \$1.2 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 \$120.4 million (sale of approximately 9.9 million common shares) and \$3.7 million (sale of approximately 1.4 million common shares) for the nine months ended September 30, 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 September 30, 2025.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company’s internal control over financial reporting during the most recent fiscal quarter 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 and the Form 10-Q for the quarter ended June 30, 2025.

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 September 30, 2025, each of which is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Exchange Act (“Rule 10b5-1 Plan”) and was adopted during an open insider trading window and no sales will commence 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
Seth Grae ⁽¹⁾	Chief Executive Officer and Chairman of the Board	Adoption	9/30/2025	12/30/2026	98,711
Andrey Mushakov ⁽²⁾	Executive Vice President of Fuel Operations	Adoption	9/30/2025	12/31/2026	180,593
Mark Tobin ⁽³⁾	Director	Adoption	9/30/2025	12/31/2026	15,000

(1) Seth Grae, the Chief Executive Officer and Chairman of the Board, entered into a pre-arranged stock trading plan pursuant to Rule 10b5-1 on September 30, 2025. Mr. Grae’s plan provides for the sale, subject to certain price limits, of up to 98,711 shares of the Company’s common stock in the aggregate. The plan terminates on December 30, 2026, unless terminated sooner in accordance with its terms.

(2) Andrey Mushakov, the Executive Vice President of Fuel Operations, entered into a pre-arranged stock trading plan pursuant to Rule 10b5-1 on September 30, 2025. Mr. Mushakov’s plan provides for the sale, subject to certain price limits, of up to 180,593 shares of the Company’s common stock in the aggregate. The plan terminates on December 31, 2026, unless terminated sooner in accordance with its terms.

(3) Mark Tobin, Director, entered into a pre-arranged stock trading plan pursuant to Rule 10b5-1 on September 30, 2025. Mr. Tobin’s plan provides for the sale at market price, of up to 15,000 shares of the Company’s common stock in the aggregate. The plan terminates on December 31, 2026, unless terminated sooner in accordance with its terms.

During the three months ended September 30, 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
10.1†	Form of Performance-Based Restricted Stock Award Agreement (incorporated by reference to the Exhibit 10.1 to the Form 8-K filed by the Company on August 29, 2025).
10.2*▲	Modification No. 3 to the Strategic Partnership Project, dated October 6, 2025, by and between the Company and Batelle Energy Alliance, LLC.
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

† Indicates a management contract or compensatory plan.

▲ Portions of this exhibit have been omitted in compliance with Item 601 of Regulation S-K.

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.

LIGHTBRIDGE CORPORATION

Date: November 6, 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)

Portions of this exhibit have been omitted in compliance with Item 601 of Regulation S-K.

SPP No. [REDACTED], Mod 3

**MODIFICATION NO. 3 TO
STRATEGIC PARTNERSHIP PROJECT
(SPP) NO. [REDACTED]**

BETWEEN

**Battelle Energy Alliance, LLC (BEA)
Operating Under Contract No. DE-AC07-05ID14517
for the U. S. Department of Energy**

AND

Lightbridge Corporation (Sponsor)

WHEREAS both Parties have entered into the above identified SPP and desire to modify said Agreement.

NOW THEREFORE, the Parties hereby agree to update the points of contacts and extend the period of performance by modifying as follows:

1. Article I. Parties to the Agreement, Appendix A, is hereby deleted in its entirety and replaced with Appendix A, Statement of Work
2. Article II. Term of the Agreement is hereby deleted in its entirety and replaced with the following:

Contractor's estimated period of performance for completion of the SOW is from 09/27/2022 through 09/27/2034. The term of this Agreement may be extended by mutual, written agreement of the Parties.

All other terms and conditions of the Agreement shall remain unchanged and in full force and effect.

BATTELLE ENERGY ALLIANCE, LLC:

Name: [REDACTED]

Title: [REDACTED]

Date: 10/02/2025

Signature: [REDACTED]

LIGHTBRIDGE CORPORATION:

Name: Andrey Mushakov

Title: Executive Vice President, Nuclear Operations

Date: October 6, 2025

Signature: [REDACTED]

Appendix A
Statement of Work
Date: 09/09/2025

Fabrication and Irradiation Testing of Lightbridge Fuel Coupon Samples and Rodlets in ATR and TREAT, and Post-Irradiation Examination
SPP No. [REDACTED] Mod. 3

1. BACKGROUND AND PURPOSE

Lightbridge Corporation (Sponsor), located in Reston, Virginia, is a nuclear fuel technology development company. Lightbridge is developing proprietary next-generation nuclear fuel technologies for current and future reactors to significantly enhance the economics and safety of nuclear power, operating at about 1,000°C cooler than standard fuel. The purpose is to improve reactor economics through power uprates, longer fuel cycles, and carbon credits while adding non-emitting baseload electricity with dramatically improved reactor safety. Lightbridge is focusing its development efforts primarily on demonstrating its metallic fuel rod technology and a fuel assembly design for power uprates and longer fuel cycles in existing pressurized water reactors as well as water-cooled small modular reactors (SMRs).

Battelle Energy Alliance, LLC, the management and operating contractor of Idaho National Laboratory (INL; Contractor), located in Idaho Falls, Idaho, is the lead nuclear laboratory for the U.S. Department of Energy (DOE). INL's nuclear engineering expertise draws upon multiple disciplines required to analyze, design, demonstrate, deploy, and operate nuclear systems. These include capabilities in neutronics, thermal hydraulics, structural-design analyses for small- and large-scale experiments, mechanistic and probabilistic safety and other risk analyses, development of robust materials for the nuclear environment, and development of destructive and nondestructive nuclear materials detection and safeguards technologies.

INL also hosts unique, unparalleled irradiation and post-irradiation examination (PIE) facilities. For steady state irradiation testing the Advanced Test Reactor (ATR) provides the ability to tailor irradiation experiments to a variety of conditions. Transient testing is also available through the Transient Test Reactor (TREAT) where unique thermal-hydraulic behaviors can be investigated. Both reactors are supported by world class fabrication and assembly facilities that can utilize conventional and more advanced fabrication methods.

2. POINTS OF CONTACT

Name /Title	Organization	Phone/Email
[REDACTED]	[REDACTED]	[REDACTED]

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

3. SCOPE OF WORK

3.1 Overview

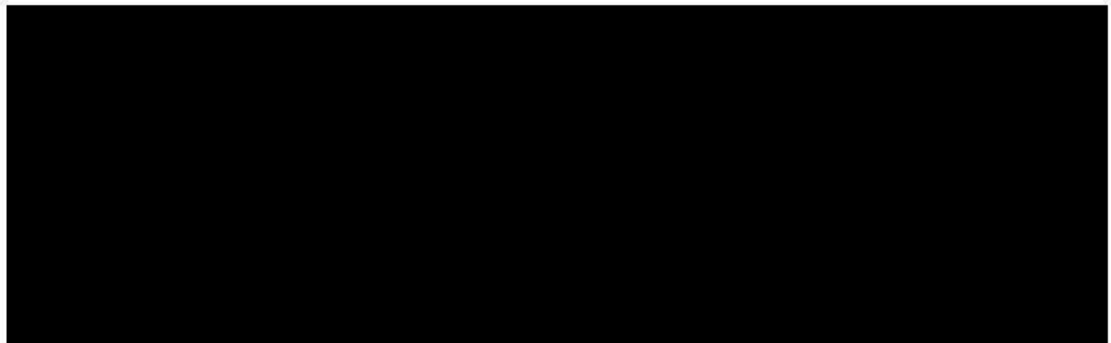
Duration of SPP

The period of performance of this SPP is twelve (12) years

All tasks are written at a high level and are not written with consideration to existing commitments, Department of Energy (DOE) directed work, or other potential work. All Project Task Statements (PTS) will be developed with consideration of existing commitments and DOE directed work at the time of the PTS development. PTS statements will be written such that upon work acceptance there is minimal risk to the capacity for INL to execute on schedule the existing commitments and DOE directed work at the time of work acceptance.

SPP Phase Descriptions

SPP Phase 1: Production of Coupons



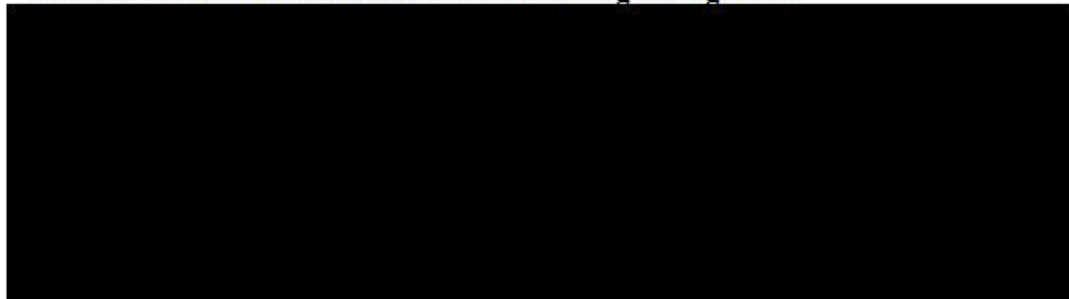
SPP Phase 2: Post-Irradiation Examination of Coupons



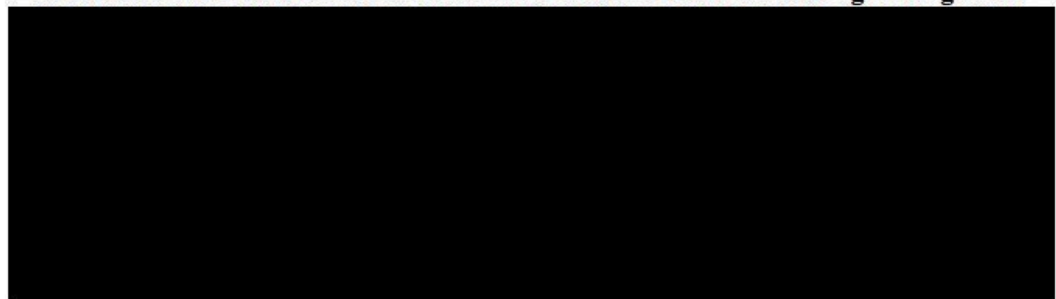
SPP Phase 3: Fabrication Processes for Lightbridge Fuel



SPP Phase 4: Post-Irradiation Examination of Lightbridge Fuel



SPP Phase 5: Post-Irradiation Examination of TREAT Irradiated Lightbridge Fuel



SPP Phase 6: Fuel Qualification Plan Support



SPP Phase 7: Safety Analysis Modeling Development and Support
[REDACTED]**Phase 8, Fuel Thermo-mechanical Modeling Development and Support**
[REDACTED]**4. QUALITY ASSURANCE**

For each of the SPP phases described above, a quality assurance plan will be developed to provide direction for the quality management oversight of the work activities during the phase. The quality assurance plan for a particular phase will be included within or referenced within the detailed Project Task Statement (PTS) for that work and will be approved by Lightbridge prior to initiation of that work. It is intended that these quality assurance plans will be developed using a “graded approach” depending on the safety significance and complexity of each phase set of activities. However, it may be acceptable to use one overall quality assurance plan for the duration of all phases if acceptable to and approved by Lightbridge.

Lightbridge Corporation, in coordination with the quality assurance plan and support activities of INL, will conduct an acceptance process (dedication) performed in accordance with ASME NQA-1 to provide reasonable assurance that the testing, examination, and resulting fuel characteristic data reported by INL, is deemed conducted in accordance with ASME NQA-1 requirements. Lightbridge Corporation will become responsible for this resulting data generation, to meet any potential requirements of NRC regulation 10 CFR 21. This assurance will be achieved by identifying the critical characteristics of the item and verifying their acceptability by inspections, tests, or analyses performed by Lightbridge supplemented as necessary by one or more of the following: audits, surveys; product inspections or witness at hold-points at INL’s facility, and analysis of historical records for acceptable performance.

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: November 6, 2025

By: /s/ Seth Grae

Seth Grae
President, Chief Executive Officer and Director
(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: November 6, 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 September 30, 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: November 6, 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)