

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, 2019**

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. Empl.
Ident. 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:	Trading Symbol(s):	Name of Each Exchange on Which Registered:
Common Stock, \$0.001 par value	LTBR	The Nasdaq Capital Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 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	<input type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-Accelerated Filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 November 5, 2019 is as follows:

Class of Securities	Shares Outstanding
Common Stock, \$0.001 par value	3,252,359

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Form 10-Q
SEPTEMBER 30, 2019

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PART I—FINANCIAL INFORMATION

Lightbridge Corporation
Unaudited Condensed Consolidated Balance Sheets

	September 30, 2019	December 31, 2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 20,581,978	\$ 24,637,295
Other receivable from joint venture	633,408	93,253
Prepaid expenses and other current assets	97,033	36,745
Total Current Assets	21,312,419	24,767,293
Patent costs	1,725,853	1,577,421
Total Assets	\$ 23,038,272	\$ 26,344,714
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 1,195,892	\$ 258,056
Investee losses in excess of investment	490,726	218,263
Total Current Liabilities	1,686,618	476,319

Commitments and contingencies – (Note 5)

Stockholders' Equity

Preferred stock, \$0.001 par value, 10,000,000 authorized shares:		
Convertible Series A preferred shares, 785,877 shares and 813,624 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively (liquidation preference \$2,687,461 and \$2,640,862 at September 30, 2019 and December 31, 2018, respectively)	785	813
Convertible Series B preferred shares, 2,666,667 shares issued and outstanding at September 30, 2019 and December 31, 2018 (liquidation preference \$4,490,594 and \$4,262,855 at September 30, 2019 and December 31, 2018, respectively)	2,667	2,667
Common stock, \$0.001 par value, 8,333,333 authorized, 3,249,353 shares and 2,738,508 shares issued and outstanding as of September 30, 2019 and December 31, 2018, respectively ⁽¹⁾	3,249	2,738
Additional paid-in capital	133,701,433	129,359,799
Accumulated deficit	(112,356,480)	(103,497,622)
Total Stockholders' Equity	21,351,654	25,868,395
Total Liabilities and Stockholders' Equity	<u>\$ 23,038,272</u>	<u>\$ 26,344,714</u>

⁽¹⁾ Authorized, issued and outstanding common shares reflect the one-for-twelve reverse stock split on October 21, 2019, as described in Note 1.

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

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Lightbridge Corporation
Unaudited Condensed Consolidated Statements of Operations

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2019	2018	2019	2018
Revenue	\$ —	\$ —	\$ —	\$ —

Operating Expenses				
General and administrative	1,463,568	1,889,401	4,051,484	5,566,022
Research and development	751,473	864,060	2,218,826	2,313,124
Total Operating Expenses	<u>2,215,041</u>	<u>2,753,461</u>	<u>6,270,310</u>	<u>7,879,146</u>
Other Operating Income and (Loss)				
Other income from joint venture	247,568	203,180	908,224	790,554
Equity in loss from joint venture	(555,113)	(1,743,340)	(3,812,463)	(4,545,112)
Total Other Operating Income and (Loss)	<u>(307,545)</u>	<u>(1,540,160)</u>	<u>(2,904,239)</u>	<u>(3,754,558)</u>
Operating Loss	<u>(2,522,586)</u>	<u>(4,293,621)</u>	<u>(9,174,549)</u>	<u>(11,633,704)</u>
Other Income and (Expenses)				
Interest income	81,172	79,035	315,691	163,054
Financing costs	—	—	—	(982,436)
Total Other Income and (Expenses)	<u>81,172</u>	<u>79,035</u>	<u>315,691</u>	<u>(819,382)</u>
Loss before income taxes	<u>(2,441,414)</u>	<u>(4,214,586)</u>	<u>(8,858,858)</u>	<u>(12,453,086)</u>
Income taxes	—	—	—	—
Net loss	<u>\$ (2,441,414)</u>	<u>\$ (4,214,586)</u>	<u>\$ (8,858,858)</u>	<u>\$ (12,453,086)</u>
Accumulated preferred stock dividend	<u>(123,455)</u>	<u>(119,000)</u>	<u>(365,973)</u>	<u>(333,667)</u>
Deemed additional dividend on preferred stock dividend due to the beneficial conversion feature	(53,047)	(49,373)	(156,232)	(135,053)
Deemed dividend on issuance on Series B convertible preferred stock due to the beneficial conversion feature	—	—	—	(2,624,836)
Net loss attributable to common stockholders	<u>(2,617,916)</u>	<u>(4,382,959)</u>	<u>(9,381,063)</u>	<u>(15,546,642)</u>
Net Loss Per Common Share, Basic and Diluted	<u>\$ (0.81)</u>	<u>\$ (1.78)</u>	<u>\$ (3.07)</u>	<u>\$ (7.51)</u>
Weighted Average Number of Common Shares Outstanding ⁽¹⁾	<u>3,222,226</u>	<u>2,458,899</u>	<u>3,058,797</u>	<u>2,070,934</u>

⁽¹⁾ Basic and diluted weighted average common shares outstanding reflect the one-for-twelve reverse stock split on October 21, 2019, as described in Note 1.

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

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Lightbridge Corporation
Unaudited Condensed Consolidated Statements of Cash Flows

	Nine Months Ended	
	September 30,	
	2019	2018
Operating Activities		
Net Loss	\$ (8,858,858)	\$ (12,453,086)
Adjustments to reconcile net loss from operations to net cash used in operating activities:		
Stock-based compensation	591,663	1,951,394
Write off of deferred financing costs	—	982,436
Equity in loss from joint venture	3,812,463	4,545,112
Changes in operating working capital items:		
Accounts receivable - fees and reimbursable project costs	—	10,400
Other receivable from joint venture	(540,155)	(521,272)
Prepaid expenses and other current assets	(60,288)	(51,134)
Accounts payable and accrued liabilities	937,836	237,914
Net Cash Used in Operating Activities	<u>(4,117,339)</u>	<u>(5,298,236)</u>
Investing Activities		
Investment in joint venture	(3,540,000)	(5,217,000)
Patent costs	(148,432)	(172,189)
Net Cash Used in Investing Activities	<u>(3,688,432)</u>	<u>(5,389,189)</u>
Financing Activities		
Net proceeds from the issuance of common stock	3,750,454	27,600,675
Net proceeds from the issuance of preferred stock	—	3,900,001
Net Cash Provided by Financing Activities	<u>3,750,454</u>	<u>31,500,676</u>
Net (Decrease) Increase in Cash and Cash Equivalents	(4,055,317)	20,813,251
Cash and Cash Equivalents, Beginning of Period	<u>24,637,295</u>	<u>4,515,398</u>
Cash and Cash Equivalents, End of Period	<u>\$ 20,581,978</u>	<u>\$ 25,328,649</u>

Supplemental Disclosure of Cash Flow Information:

Cash paid during the period:		
Interest paid	\$ —	\$ —
Income taxes paid	\$ —	\$ —
Non-Cash Financing Activity:		
Deemed dividend on issuance Series B convertible preferred stock due to the beneficial conversion feature	\$ —	\$ 2,624,836
Accumulated preferred stock dividend	\$ 522,205	\$ 333,667
Conversion of Series A convertible preferred stock to common stock and payment of paid-in-kind dividends to Series A preferred stockholder	\$ 91,635	\$ 207

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

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Lightbridge Corporation
Unaudited Condensed Consolidated Statements of Changes in Stockholders' Equity

For the Nine Months Ended September 30, 2018

	Series A Preferred Stock		Series B Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Equity
	Shares	Amount	Shares	Amount	Shares ⁽¹⁾	Amount			
Balance January 1, 2018	—	\$ 1,020	—	\$ —	1,061,475	\$ 1,062	\$ 93,614,216	\$ (87,821,514)	\$ 5,794,783
Issuance of Preferred Stock	—	—	2,666,667	2,667	—	—	3,897,334	—	3,900,001
Shares issued - registered offerings - net of offering costs	—	—	—	—	891,128	891	20,721,323	—	20,722,215
Cashless exercise of stock warrants	—	—	—	—	41,387	41	(41)	—	—

Stock-based compensation	—	—	—	—	—	—	—	1,273,035	—	1,273,035
Net loss for the three months ended March 31, 2018	—	—	—	—	—	—	—	—	(4,721,487)	(4,721,487)
Balance – March 31, 2018	1,020,000	\$ 1,020	2,666,667	\$ 2,667	1,993,990	\$ 1,994	\$119,505,867	\$ (92,543,001)	\$26,968,547	
Shares issued - registered offerings – net of offering costs	—	—	—	—	380,749	381	5,146,120	—	—	5,146,501
Stock-based compensation	—	—	—	—	—	—	148,710	—	—	148,710
Conversion for payment of dividends, 111,260 shares of preferred stock to 10,407 shares of common stock (reflect the one-for-twelve reverse stock split on October 21, 2019)	(111,260)	(111)	—	—	10,407	10	101	—	—	—
Net loss for the three months ended June 30, 2018	—	—	—	—	—	—	—	—	(3,517,013)	(3,517,013)
Balance – June 30, 2018	908,740	\$ 909	2,666,667	\$ 2,667	2,385,146	\$ 2,385	\$124,800,798	\$ (96,060,014)	\$28,746,745	
Shares issued - registered offerings – net of offering costs	—	—	—	—	147,327	147	1,731,812	—	—	1,731,959
Stock-based compensation	—	—	—	—	—	—	529,649	—	—	529,649
Conversion for payment of dividends, 95,116 shares of preferred stock to 9,211 shares of common stock (reflect the one-for-twelve reverse stock split on October 21, 2019)	(95,116)	(95)	—	—	9,211	9	86	—	—	—
Shares issued in payment of Series A preferred stock dividend	—	(1)	—	—	61	—	1	—	—	—
Net loss for the three months ended September 30, 2018	—	—	—	—	—	—	—	—	(4,214,586)	(4,214,586)
Balance – September 30, 2018	813,624	\$ 813	2,666,667	\$ 2,667	2,541,745	\$ 2,541	\$127,062,346	\$(100,274,600)	\$26,793,767	

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For the Nine Months Ended September 30, 2019

	Series A Preferred Stock		Series B Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Equity
	Shares	Amount	Shares	Amount	Shares ⁽¹⁾	Amount			
Balance	—								
January 1, 2019	813,624	\$ 813	2,666,667	\$ 2,667	2,738,508	\$ 2,738	\$129,359,799	\$(103,497,622)	\$25,868,395
Shares issued - registered offerings – net of offering costs	—	—	—	—	273,936	274	1,986,211	—	1,986,485
Stock-based compensation	—	—	—	—	—	—	335,013	—	335,013
Net loss for the three months ended March 31, 2019	—	—	—	—	—	—	—	(3,110,527)	(3,110,527)
Balance – March 31, 2019	813,624	\$ 813	2,666,667	\$ 2,667	3,012,444	\$ 3,012	\$131,681,023	\$(106,608,149)	\$25,079,366

Conversion for payment of dividends, 27,747 shares of preferred stock to 2,782 shares of common stock (reflect the one-for-twelve reverse stock split on October 21, 2019)	(27,747)	(28)	—	—	2,782	3	25	—	—
Shares issued - registered offerings – net of offering costs	—	—	—	—	118,600	119	929,795	—	929,914
Stock-based compensation	—	—	—	—	—	—	237,272	—	237,272
Net loss for the three months ended June 30, 2019	—	—	—	—	—	—	—	(3,306,917)	(3,306,917)
Balance – June 30, 2019	785,877	\$ 785	2,666,667	\$ 2,667	3,133,826	\$ 3,134	\$132,848,115	\$(109,915,066)	\$22,939,635
Shares issued - registered offerings – net of offering costs	—	—	—	—	115,527	115	833,940	—	834,055
Stock-based compensation	—	—	—	—	—	—	19,378	—	19,378
Net loss for the three months ended September 30, 2019	—	—	—	—	—	—	—	(2,441,414)	(2,441,414)
Balance – September 30, 2019	<u>785,877</u>	<u>\$ 785</u>	<u>2,666,667</u>	<u>\$ 2,667</u>	<u>3,249,353</u>	<u>\$ 3,249</u>	<u>\$133,701,433</u>	<u>\$(112,356,480)</u>	<u>\$21,351,654</u>

(1) Common stock shares reflect the one-for-twelve reverse stock split on October 21, 2019, as described in Note 1.

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

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LIGHTBRIDGE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

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

Basis of presentation

The accompanying unaudited condensed consolidated financial statements of Lightbridge Corporation and its subsidiaries have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission, or the SEC, including the instructions to Form 10-Q and Regulation S-X. Certain information and note disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States of America, 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 notes necessary for comprehensive consolidated financial statements and should be read in conjunction with our audited consolidated financial statements for the year ended December 31, 2018, included in our Annual Report on Form 10-K for the year ended December 31, 2018.

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 period presented are not necessarily indicative of the

results that might be expected for the entire fiscal year. When used in these notes, the terms “Lightbridge”, “Company,” “we,” “us” or “our” mean Lightbridge Corporation and all entities included in our 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 and commercializing next generation nuclear fuel technology.

Reverse Stock Split

Effective October 21, 2019, we conducted a one-for-twelve reverse stock split of our issued and outstanding common stock and have retroactively adjusted our common shares outstanding, stock options, warrants amounts outstanding and per share information contained in these condensed consolidated financial statements.

The one-for-twelve reverse stock split automatically converted every twelve shares of the Company’s outstanding common stock prior to the effectiveness of the reverse stock split into one share of common stock. As a result, the number of common shares issued and outstanding at September 30, 2019 and December 31, 2018 decreased from 38,992,237 shares to 3,249,353 shares and from 32,862,090 shares to 2,738,508 shares, respectively. Our authorized capital of 100,000,000 shares of common stock with a par value of \$0.001, was decreased to 8,333,333 shares of common stock authorized with a par value of \$0.001. Accordingly, stockholders’ equity reflects the reverse stock split by reclassifying from common stock to additional paid-in capital in an amount equal to the par value of the decreased shares resulting from the reverse stock split. The par value per share was not adjusted as a result of the one-for-twelve reverse stock split.

No fractional shares were issued in the reverse stock split. Stockholders who would have otherwise held fractional shares received a whole share in respect of such fractional shares. The reverse stock split did not impact any stockholder’s percentage ownership of the Company, subject to the treatment of fractional shares. The reverse stock split was undertaken to increase the market price per share of the Company’s common stock to allow the Company to regain compliance with the Nasdaq continued listing standards relating to minimum closing bid price per share requirements.

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Liquidity

The Company has adopted Accounting Standards Codification (“ASC”), 205-40, *Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern*. This guidance amended the existing requirements for disclosing information about an entity’s ability to continue as a going concern and explicitly requires management to assess an entity’s ability to continue as a going concern and to provide related disclosure in certain circumstances. The following information reflects the results of management’s assessment, plans, and conclusion of the Company’s ability to continue as a going concern.

At September 30, 2019, the Company had approximately \$20.6 million in cash and had a working capital surplus of approximately \$19.6 million. The Company believes that its current financial resources, as of the date of the issuance of these financial statements, are sufficient to fund its current 12 month operating budget, alleviating the substantial doubt raised by our historical operating results and satisfying our estimated liquidity needs 12 months from the issuance of these financial statements.

The Company has expended substantial funds on its research and development activities to date and currently expects to continue making equity contributions to its joint venture company, Enfission, LLC. The Company’s net cash used in operating activities during the nine months ended September 30, 2019 was approximately \$4.1 million, and the Company will have continued negative cash flows for the foreseeable future. Net losses incurred for the nine months ended September 30, 2019 and 2018 amounted to approximately \$8.9 million and \$12.5 million, respectively. As of September 30, 2019, the Company has an accumulated deficit of approximately \$112.4 million, representative of recurring losses since inception. The Company has incurred recurring losses since inception because it is a development stage nuclear fuel development company. The Company expects to continue to incur losses due to future costs and expenses related to the Company’s research and development expenses and general and administrative expenses.

The amount of cash and cash equivalents on the balance sheet as of the date of this filing is approximately \$20 million. The Company also may consider other plans to fund operations including: (1) raising additional capital through equity issuances, debt financings or from other sources; (2) additional funding through new relationships to help fund future research and development costs; and (3) other capital raises. The Company may issue securities, including common stock, preferred stock, and stock purchase contracts through private placement transactions or registered public offerings, pursuant to its registration statement on Form S-3 filed with the SEC on March 15, 2018 and declared effective on March 23, 2018. There can be no assurance as to the availability or terms upon which financing and capital might be available. The Company’s future liquidity needs, and ability to address those needs, will largely be determined by the success of the development of its nuclear fuel, key nuclear development and regulatory events, and its business decisions in the future.

Equity Method Investment – Enfission, LLC - Joint Venture with Framatome Inc.

In January 2018, Lightbridge and Framatome Inc., a subsidiary of Framatome SAS (formerly part of AREVA SAS), finalized and launched Enfission, LLC (“Enfission”), a 50-50 joint venture company, to develop, license, and sell nuclear fuel assemblies based on Lightbridge-designed metallic fuel technology and other advanced nuclear fuel intellectual property. Framatome SAS and Framatome Inc. (collectively “Framatome”) is a global leader in designing, building, servicing, and fueling reactor fleet and advancing nuclear energy and is majority owned by Électricité de France, the world’s largest owner and operator of nuclear power plants. Lightbridge and Framatome began joint fuel development and regulatory licensing work under previously signed agreements initiated in March 2016. The joint venture, Enfission, is a Delaware-based limited liability company that was formed on January 24, 2018.

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Management has determined that its investment in Enfission should be accounted for under the equity method of accounting. Under the equity method of accounting, an investee company's accounts are not reflected within the Company's condensed consolidated balance sheets and condensed consolidated statements of operations; however, the Company's share of the losses of the investee company is reported in the "Equity in loss from joint venture" line item in the condensed consolidated statements of operations, and the Company's carrying value in an equity method investee company is reported in the "Investment in joint venture" or "Investee losses in excess of investment" line item in the condensed consolidated balance sheets.

The Company allocates income or loss utilizing the hypothetical liquidation book value ("HLBV") method, based on the change in each JV member's claim on the net assets of the JV's operating agreement at period end after adjusting for any distributions or contributions made during such period. The Company uses this method because of the difference between the distribution rights and priorities set forth in the Enfission operating agreement and what is reflected by the underlying percentage ownership interests of the joint venture.

We evaluate on a quarterly basis, whether our investment accounted for under the equity method of accounting has an other than temporary impairment ("OTTI"). An OTTI occurs when the estimated fair value of an investment is below the carrying value and the difference is determined not likely to be recoverable. This evaluation requires significant judgment regarding, but not limited to, the severity and duration of the impairment; the ability and intent to hold the security until recovery; financial condition, liquidity, and near-term prospects of the issuer; specific events; and other factors.

Basis of Consolidation

These condensed consolidated financial statements include the accounts of Lightbridge, a Nevada corporation, and our wholly-owned subsidiaries, TPI, a Delaware corporation, and Lightbridge International Holding LLC, a Delaware limited liability company. These wholly-owned subsidiaries are inactive. All significant intercompany transactions and balances have been eliminated in consolidation.

The Company owns a 50% interest in Enfission – accounted for using the equity method of accounting (see Note 3. Investment in Joint Venture (Investee Losses in Excess of Investment)). Enfission is deemed to be a variable interest entity ("VIE") under the VIE model of consolidation because it currently does not have sufficient funds to finance its operations and will require significant additional equity or subordinated debt financing. The Company has determined that it is not the primary beneficiary of the VIE since it does not have the power to direct the activities that most significantly impact the VIE's performance.

In determining whether the Company is the primary beneficiary and whether it has the right to receive benefits or the obligation to absorb losses that could potentially be significant to the VIE, the Company evaluates all its economic interests in the entity, regardless of form. This evaluation considers all relevant factors of the entity's structure including the entity's capital structure, contractual rights to earnings (losses) as well as other contractual arrangements that have potential to be economically significant. Although the Company has the obligation to absorb the losses as of this reporting period, it has concluded that it is not the primary beneficiary since the major decision making for all significant economic activities require the approval of both the Company and Framatome. The significant economic activities identified were financing activities, research and development activities, licensing activities, manufacturing of fuel assembly product activities, and marketing and sales activities. The evaluation of each of these factors in reaching a conclusion about the potential significance of our economic interests and control is a matter that requires the exercise of management judgment.

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Certain Risks, Uncertainties, and Concentrations

The Company is an early stage company and will need additional funding by way of strategic alliances, government grants, further offerings of equity securities, an offering of debt securities, or a financing through a bank in order to support the remaining research and development activities required to further enhance and complete the development of our fuel products to a commercial stage.

The Company participates in a government-regulated industry. Our operating results are affected by a wide variety of factors including

decreases in the use or public favor of nuclear power, the need for additional research and development of our metallic fuel, our joint venture operations within Enffission, and our ability to protect our intellectual property. Due to these factors and potentially other factors, we may experience substantial period-to-period fluctuations in our future operating results. Potentially, a loss of any key officer, key management, or other personnel could impair our ability to successfully execute our business strategy, particularly when these individuals have acquired specialized knowledge and skills with respect to nuclear power and our operations.

Our future operations and earnings may depend on the results of the Company's operations outside the United States, including some of its research and development activities. There can be no assurance that the Company will be able to successfully continue to conduct such operations, and a failure to do so would have a material adverse effect on the Company's research and development 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, competition, changes in government regulations and support for nuclear power, changes in accounting and taxation standards, inability to achieve overall long-term goals, future impairment charges, and global or regional catastrophic events. The Company may be subject to various additional political, economic, and other uncertainties.

Cash and Cash Equivalents

The Company may at times invest its excess cash in savings accounts and US Treasury Bills. It classifies all highly liquid investments with stated maturities of three months or less from date of purchase as cash equivalents and all highly liquid investments with stated maturities of greater than three months as marketable securities. The Company holds cash balances in excess of the federally insured limits of \$250,000. It deems this credit risk not to be significant as cash is held by three prominent financial institutions in 2019 and 2018. The Company buys and holds short-term US Treasury Bills from Treasury Direct to maturity. US Treasury Bills totaled approximately \$10.0 million at September 30, 2019 and December 31, 2018. The remaining \$10.6 million and \$14.6 million at September 30, 2019 and December 31, 2018, respectively, are on deposit with three notable financial institutions with substantially all of the \$10.6 million and \$14.6 million with one financial institution. Total cash and cash equivalents held, as reported on the accompanying condensed consolidated balance sheets, totaled approximately \$20.6 million and \$24.6 million at September 30, 2019 and December 31, 2018, respectively.

Beneficial Conversion Feature of Convertible Preferred Stock

The Company accounts for the beneficial conversion feature on its convertible preferred stock in accordance with ASC 470-20, *Debt with Conversion and Other Options*. The Beneficial Conversion Feature ("BCF") of convertible preferred stock is normally characterized as the convertible portion or feature that provides a rate of conversion that is below market value or in-the-money when issued. The Company records a BCF related to the issuance of convertible preferred stock when issued. Beneficial conversion features that are contingent upon the occurrence of a future event are recorded when the contingency is resolved.

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To determine the effective conversion price, the Company first allocates the proceeds received to the convertible preferred stock and then uses those allocated proceeds to determine the effective conversion price. If the convertible instrument is issued in a basket transaction (i.e. issued along with other freestanding financial instruments), the proceeds should first be allocated to the various instruments in the basket. The intrinsic value of the conversion option should be measured using the effective conversion price for the convertible preferred stock on the proceeds allocated to that instrument. The effective conversion price represents proceeds allocable to the convertible preferred stock divided by the number of shares into which it is convertible. The effective conversion price is then compared to the per share fair value of the underlying common shares on the commitment date. The accounting for a BCF requires that the BCF be recognized by allocating the intrinsic value of the conversion option to additional paid-in capital, resulting in a discount on the convertible preferred stock. This discount should be accreted from the date on which the BCF is first recognized through the earliest conversion date for instruments that do not have a stated redemption date. The intrinsic value of the BCF is recognized as a deemed dividend on convertible preferred stock over a period specified in the guidance. In the case of both the Series A and Series B preferred shares, the holders of the shares had the right to convert beginning at the date of issuance with the result that the accretion of the related BCF was recognized immediately at issuance.

When the Company's preferred stock has dividends that are paid-in-kind ("PIK") (i.e. the holder is paid in additional shares or liquidation/dividend rights), and either (1) neither the Company nor the holder has the option for the dividend to be paid in cash, or (2) the PIK amounts do not accrue to the holder if the instrument is converted prior to the PIK amount otherwise being accrued or due, additional BCF is recognized as dividends accrue to the extent that the per share fair value of the underlying common shares at the commitment date exceeds the conversion price.

Recently Adopted Accounting Pronouncements

Compensation – Stock Compensation — In June 2018, the FASB issued ASU 2018-07, *Compensation – Stock Compensation (Topic 718)*:

Improvements to Nonemployee Share-Based Payment Accounting. ASU 2018-07 allows companies to account for nonemployee awards in the same manner as employee awards. The guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those annual periods. The Company elected the early adoption of this ASU on July 1, 2018. The adoption of ASU 2018-07 did not have a material impact on the Company's financial position, results of operations or cash flows.

Leases — In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. ASU 2016-02 amends existing lease accounting guidance and requires recognition of most lease arrangements on the balance sheet. The adoption of this standard did not result in the Company recognizing a right-of-use asset representing its rights to use the underlying asset for the lease term with an offsetting lease liability. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, with early adoption permitted. The adoption of this standard does not currently have a material impact on the Company's financial position, results of operations or cash flows.

ASU 2018-09, Codification Improvements — This ASU represents changes in various Subtopics to clarify, correct errors, or make minor improvements. The amendments are not expected to have a significant effect on current accounting practice. Subtopics impacted by this ASU that are relevant to the Company include *Subtopic 220-10 Income Statement — Reporting Comprehensive Income-Overall*, *Subtopic 718-740 Compensation — Stock Compensation-Income Taxes*, *Subtopic 805-740 Business Combinations — Income Taxes*, and *Subtopic 820-10 Fair Value Measurement-Overall*. Many of the amendments within this ASU do not require transition and are effective upon issuance. However, some are not effective until fiscal years beginning after December 15, 2018. The amendments within this ASU did not have a material impact on the Company's condensed consolidated financial statements or the related footnote disclosures.

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Recent Accounting Pronouncements – To Be Adopted

Intangibles, Goodwill and Other — In January 2017, the FASB issued ASU 2017-04, *Intangibles – Goodwill and Other (Topic 350) – Simplifying the Test for Goodwill Impairment*. To simplify the subsequent measurement of goodwill, ASU 2017-04 eliminates Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under Step 2, an entity had to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, ASU 2017-04 requires an entity to perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. ASU 2017-04 also eliminates the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails that qualitative test, to perform Step 2 of the goodwill impairment test. Therefore, the same impairment assessment applies to all reporting units. An entity is required to disclose the amount of goodwill allocated to each reporting unit with a zero or negative carrying amount of net assets. An entity still has the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. ASU 2017-04 is effective for fiscal years beginning after December 15, 2019. The Company will adopt ASU 2017-04 commencing in the first quarter of fiscal 2020. The Company does not believe this standard will have a material impact on its condensed consolidated financial statements or the related footnote disclosures.

ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement — This ASU modifies the disclosure requirements on fair value measurements in Topic 820, including the removal, modification to, and addition of certain disclosure requirements. This ASU will be effective for fiscal years beginning after December 15, 2019 with early adoption permitted. The majority of the disclosure changes are to be applied on a prospective basis. The Company does not expect this ASU to have a significant impact on the Company's fair value disclosures and no future impact is expected to the Company's condensed consolidated financial statements.

The Company does not believe that other standards, which have been issued but are not yet effective, will have a significant impact on its financial statements.

Note 2. Net Loss Per Share

Basic net loss per share is computed using the weighted-average number of common shares outstanding during the period except that it does not include unvested common shares subject to repurchase or cancellation. Diluted net income 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, warrants, restricted shares, and unvested common shares subject to repurchase or cancellation. The dilutive effect of outstanding stock options, restricted shares, restricted stock units, and warrants is not reflected in diluted earnings per share because we incurred net losses for the three months and nine months ended September 30, 2019 and 2018, and the effect of including these potential common shares in the net loss per share calculations would be anti-dilutive and are therefore not included in the calculations.

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The following table sets forth the computation of the basic and diluted loss per share (rounded in millions except shares outstanding and per share amounts):

	<u>2019</u>	<u>2018</u>
Numerator:		
Net loss attributable to common stockholders	\$ (9.4)	\$ (15.5)
Denominator:		
Weighted-average common shares outstanding ⁽¹⁾	3,058,797	2,070,934
Basic and diluted net loss per share	\$ (3.07)	\$ (7.51)

⁽¹⁾ Weighted average shares used to calculate basic and diluted loss per share reflect the one-for-twelve reverse stock split on October 21, 2019 as described in Note 1.

Note 3. Investment in Joint Venture (Investee Losses in Excess of Investment)

Pursuant to the Enfission operating agreement, both partners agreed that Enfission will serve as an exclusive vehicle to develop, license, and sell nuclear fuel assemblies based on Company-designed metallic fuel technology and other advanced nuclear fuel intellectual property licensed to Enfission by the Company and Framatome or their affiliates. The joint venture builds on the joint fuel development and regulatory licensing work under previously signed agreements initiated in March 2016.

The Enfission operating agreement provided that the Company and Framatome each hold 50% of the total issued Class A voting membership units of the joint venture.

The Company's equity in losses in excess of its investment are accounted for under the equity method consisted of the following as of September 30, 2019 (rounded in millions):

<u>Investment Name</u>	<u>Ownership Interest</u>	<u>Carrying Amount</u>
Enfission, LLC	50%	
Total contributions		\$ 9.1
Less: Share of the loss in investment in Enfission		(9.6)
Total - Equity Method Investment		\$ (0.5)

The Company invested approximately \$9.1 million in Enfission and Framatome invested approximately \$2.9 million of equity for the period from January 24, 2018 (date of inception of Enfission) to September 30, 2019. The cash balance in Enfission at September 30, 2019 was approximately \$1.2 million. During the nine months ended September 30, 2019, Enfission incurred a loss of approximately \$5.4 million, and accordingly, the Company recorded its share of the loss in investment in Enfission, in accordance with the provisions in the joint venture operating agreement, of approximately \$3.8 million in the accompanying condensed consolidated statement of operations for the nine months ended September 30, 2019.

The Company's share of the joint venture accumulated losses have exceeded its capital contributions by approximately \$0.5 million and as a result, in accordance with equity method accounting, its share of the equity losses in excess of the equity contributions since January 24, 2018 have been recorded as investee loss in excess of investment, under the current liability section of the accompanying balance sheets.

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The Company is committed to fund Enfission for its share of Enfission's liabilities at September 30, 2019. The Company currently expects to continue providing additional equity contributions in 2019 and for the foreseeable future.

Summarized balance sheet information for the Company's equity method investee Enfission as of September 30, 2019 and December 31, 2018 is presented in the following table (rounded in millions):

	September 30, 2019	December 31, 2018
Assets		
Cash	\$ 1.2	\$ 0.7
Other current assets	0.1	0.7
Total assets	<u>\$ 1.3</u>	<u>\$ 1.4</u>

Liabilities and equity		
Total liabilities	\$ 2.3	\$ 1.9
Equity	(1.0)	(0.5)
Total liabilities and equity	<u>\$ 1.3</u>	<u>\$ 1.4</u>

Summarized income statement information for the Company's equity method investee Enfission is presented in the following table for the nine months ended September 30, 2019 and for the period from January 24, 2018 (Date of Inception) to September 30, 2018 (rounded in millions):

	For the Nine Months Ended September 30, 2019	For the period from January 24, 2018 (Date of Inception) to September 30, 2018
Net sales and revenue	\$ 0.0	\$ 0.0
Research and development costs	4.4	3.7
Administrative expenses	1.0	0.8
Total Operating Loss	\$ 5.4	\$ 4.5
Loss from operations	\$ 5.4	\$ 4.5
Net loss	<u>\$ 5.4</u>	<u>\$ 4.5</u>

As of September 30, 2019, and December 31, 2018, the total receivable due from Enfission was approximately \$0.6 million and \$0.1 million, respectively, which represents consulting fees Lightbridge charged to Enfission and reimbursable expenses paid by Lightbridge on Enfission's behalf (see Note 8. Related Party Transactions). Based on an evaluation of this equity method investment, we determined that no OTTI has occurred as of September 30, 2019.

Note 4. Accounts Payable and Accrued Liabilities

Accounts payable and accrued expenses consisted of the following (rounded in millions):

	September 30, 2019	December 31, 2018
Trade payables	\$ 0.1	\$ 0.1
Accrued expenses and other	0.3	0.2
Accrued bonuses	0.8	0.0
Total	<u>\$ 1.2</u>	<u>\$ 0.3</u>

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Note 5. Commitments and Contingencies

Commitments

Operating Leases

The Company leases office space for a 12-month term with a monthly payment of approximately \$15,000 per month for office rent. The term of the lease extends through December 31, 2019.

The future minimum lease payments required under the non-cancellable operating leases for the remainder of the year total \$45,000.

Contingency

Litigation

A former Chief Financial Officer of the Company filed a complaint against the Company with the US Occupational Safety and Health Administration ("OSHA") on March 9, 2015. This complaint was dismissed by OSHA in January 2018 without any findings against the Company. On March 14, 2018 an appeal was filed. The Company has and will continue to vigorously defend this appeal and believes that this appeal hearing will not result in any findings against the Company. On September 6, 2019, the Company filed a motion for summary decision seeking a decision in its favor as a matter of law. As of September 30, 2019, and December 31, 2018, legal fees of approximately \$81,000 and \$4,000 were owed, respectively, and are expected to be paid in full by the Company's insurance carriers.

Note 6. Research and Development Costs

Lightbridge's total corporate research and development costs, included in the caption research and development expenses in the accompanying condensed consolidated statement of operations amounted to approximately \$0.8 million and \$0.9 million for the three months ended September 30, 2019 and 2018 and approximately \$2.2 million and \$2.3 million for the nine months ended September 30, 2019 and 2018, respectively. See Note 8. Related Party Transactions regarding consulting fees charged to Enfission for research and development expenses incurred by Lightbridge on behalf of Enfission.

Note 7. Stockholders' Equity and Stock-Based Compensation

All common shares, warrants, and stock option amounts and certain market price per share amounts for all periods reported below has been retroactively adjusted to reflect the Company's one-for-twelve reverse stock split, which was effective October 21, 2019.

At September 30, 2019, there were 3,249,353 common shares outstanding, and there were also outstanding warrants relating to 70,361 shares of common stock, stock options relating to 435,979 shares of common stock, 785,877 shares of Series A convertible preferred stock convertible into 65,490 shares of common stock (plus accrued dividends of \$529,929 relating to an additional 16,088 common shares), and 2,666,667 shares of Series B convertible preferred stock convertible into 222,222 shares of common stock (plus accrued dividends of \$490,595, relating to an additional 27,255 common shares), all totaling, 4,086,748 shares of common stock and all common stock equivalents, including accrued preferred stock dividends, outstanding at September 30, 2019.

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At December 31, 2018, there were 2,738,508 common shares outstanding, and there were also outstanding warrants relating to 70,361 shares of common stock, stock options relating to 467,013 shares of common stock, 813,624 shares of Series A convertible preferred stock convertible into 67,802 shares of common stock (plus accrued dividends of \$407,382 relating to an additional 12,367 common shares), and 2,666,667 shares of Series B convertible preferred stock convertible into 222,222 shares of common stock (plus accrued dividends of \$262,856, relating to an additional 14,603 common shares), all totaling 3,592,876 shares of common stock and all common stock equivalents, including accrued preferred stock dividends, outstanding at December 31, 2018.

Common Stock Equity Offerings

ATM Offerings

On May 28, 2019, the Company entered into an at-the-market equity offering sales agreement ("2019 ATM") with Stifel, Nicolaus & Company, Incorporated ("Stifel"), pursuant to which the Company may issue and sell shares of its common stock from time to time through Stifel as the Company's sales agent. Sales of the Company's common stock through the Agent, 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. 333-223674) filed on March 15, 2018 and declared effective March 23, 2018. Due to the offering limitations currently applicable to the Company under General Instruction I.B.6. of Form S-3 and the Company's public float as of May 28, 2019, and in accordance with the terms of the sales agreement, the Company may offer and sell shares of its common stock having an aggregate offering price of up to \$13,500,000 through this prospectus supplement.

On March 30, 2018, the Company entered into an at-the-market issuance sales agreement with B. Riley FBR, Inc. ("B. Riley") that superseded the prior at-the market agreement with B. Riley (collectively "2018 ATM"), pursuant to which the Company could issue and sell shares of its common stock from time to time through B. Riley as the Company's sales agent. Effective March 29, 2019, the Company and B. Riley terminated this 2018 ATM agreement.

Sales under the 2019 ATM and under the 2018 ATM for the three months and nine months ended September 30, 2019 were 115,527 shares and 508,063 shares (pre-split: approximately 1.4 million shares and 6.1 million shares), respectively. Net proceeds received from the ATM sales during the three months and nine months ended September 30, 2019 were \$0.8 million and \$3.8 million, respectively. The Company records its ATM sales on a settlement date basis.

Sales under the 2018 ATM that were made during the three months and nine months ended September 30, 2018 were 147,327 shares and 1,419,204 shares (pre-split: approximately 1.8 million shares and 17.0 million shares), respectively. Net proceeds received from the ATM sales during the three months and nine months ended September 30, 2018 were \$1.7 million and \$27.6 million, respectively.

Preferred Stock Equity Offerings

Series B Preferred Stock - Securities Purchase Agreement

On January 30, 2018, the Company issued 2,666,667 shares of newly created Non-Voting Series B Convertible Preferred Stock (the "Series

B Preferred Stock”) and associated warrants to purchase up to 55,555 shares of the Company’s common stock to the several purchasers for approximately \$4.0 million or approximately \$1.50 per share of Series B Preferred Stock and associated warrant. Dividends accrue on the Series B Preferred Stock at the rate of 7% per year and will be paid in-kind through an increase in the liquidation preference per share. The liquidation preference, initially \$1.50 per share of Series B Preferred Stock, is the base that is also used to determine the number of common shares into which the Series B Preferred Stock will convert as well as the calculation of the 7% dividend. Each share of Series B Preferred Stock is convertible at the option of the holder into such number of shares of the Company’s common stock equal to the liquidation preference divided by the conversion price of \$18 per share subject to adjustments in the case of stock splits and stock dividends.

of the Company's common stock paid on shares of common stock) or property are paid on common shares or shares of Series A Preferred Stock. The amount of the dividends will equal the amount to which the holder would be entitled if all shares of Series B Preferred Stock had been converted to common stock immediately prior to the record date.

The warrants had a per share of common stock exercise price of \$22.50. The warrants were exercisable upon issuance and expired six months after issuance on July 30, 2018. Warrants were also issued to the investment bank who introduced these investors, which were subsequently transferred to the principal of the investment bank, entitling the holder to purchase 11,119 common shares in the Company at an exercise price of \$18 per share, up to and including January 30, 2021. On February 6, 2017 the Company entered into an agreement with this investment bank. The agreement calls for monthly retainer payments of \$15,000, which are credited against any transaction introductory fee earned by the investment bank. This agreement calls for a 7% transaction introductory fee and warrants equal to 5% of the total transaction amount, at a strike price equal to the offering price for a three-year term.

The holders of the Series B Preferred Stock have no voting rights. In addition, as long as the shares of Series A Preferred Stock are outstanding, the Company may not take certain actions without first having obtained the affirmative vote or waiver of the holders of a majority of the outstanding shares of Series B Preferred Stock. The Company has the option at any time after August 2, 2019 to redeem some or all of the outstanding Series B Preferred Stock for an amount in cash equal to the liquidation preference plus the amount of any accrued but unpaid dividends of the Series B Preferred Stock being redeemed. The holders of the Series B Preferred Stock do not have the ability to require the Company to redeem the Series B Preferred Stock.

The Company has the option of forcing the conversion of all or part of the Series B Preferred Stock if at any time the average closing price of the Company's common stock for a thirty-trading day period is greater than \$65.88 prior to August 2, 2019 or greater than \$98.82 at any time. The Company can exercise this option only if it also requires the conversion of the Series A Preferred Stock in the same proportion as it is requiring of the Series B Preferred Stock.

Of the \$4 million proceeds, approximately \$0.3 million was allocated to the warrants with the remaining \$3.7 million allocated to the Series B Preferred Stock. The 2,666,667 Series B Preferred Stock was initially convertible into 222,222 shares of common stock. The average of the high and low market prices of the common stock on January 30, 2018, the date of the closing of the sale of the preferred stock, was approximately \$28.08 per share. At \$28.08 per share the common stock into which the Series B Preferred Stock was initially convertible was valued at approximately \$6.2 million. This amount was compared to the \$3.6 million of proceeds allocated to the Series B Preferred Stock to indicate that a BCF of approximately \$2.6 million existed at the date of issuance, which was immediately accreted as a deemed dividend because the conversion rights were immediately effective. This deemed dividend is included on the statement of operations for the nine months ended September 30, 2018.

Additionally, comparison of the original \$1.50 conversion price prior to the reverse stock split on October 21, 2019 of the PIK dividends to the \$2.34 commitment date fair value per share on January 30, 2018 indicates that each PIK dividend will accrete \$0.84 of BCF as an additional deemed dividend for every \$1.50 of PIK dividend accrued. Total deemed dividends for this PIK dividend for the nine months ended September 30, 2019 and year ended December 31, 2018 were approximately \$0.1 million and \$0.1 million, respectively.

The accumulated dividend (unpaid) at September 30, 2019 and December 31, 2018 was approximately \$0.5 million and \$0.3 million, respectively. The Series B Preferred Shares outstanding as of September 30, 2019 was 2,666,667 shares with an aggregate liquidation preference of approximately \$4.5 million, including accumulated dividends, while the Series B Preferred Shares outstanding as of December 31, 2018 was 2,666,667 shares with an aggregate liquidation preference of approximately \$4.3 million, including accumulated dividends.

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Series A Preferred Stock - Securities Purchase Agreement

On August 2, 2016, the Company issued 1,020,000 shares of newly created Non-Voting Series A Convertible Preferred Stock (the "Series A Preferred Stock") to General International Holdings, Inc. for \$2.8 million or approximately \$2.75 per share. Dividends accrue on the Series A Preferred Stock at the rate of 7% per year and will be paid in-kind through an increase in the liquidation preference per share. The liquidation preference, initially \$2.7451 per share of Series A Preferred Stock, is the base that is also used to determine the number of common shares into which the Series A Preferred Stock will convert as well as the calculation of the 7% dividend. Each share of Series A Preferred Stock is convertible at the option of the holder into such number of shares of the Company's common stock equal to the liquidation preference divided by the conversion price of \$32.94 per share subject to adjustments in the case of stock splits and stock dividends.

Holders of the Series A Preferred Stock are also entitled to participating dividends whenever dividends in cash securities (other than shares of the Company's common stock) or property are paid on common shares. The amount of the dividends is the amount to which the holder

would be entitled if all shares of Series A Preferred Stock had been converted to common stock immediately prior to the record date.

The Company has the option of forcing the conversion of the Series A Preferred Stock if the trading price for the Company's common stock is more than two times the applicable conversion price (approximately \$32.94 per share) before the third anniversary of the issuance of the Series A Preferred Stock, or if the trading price is more than three times the applicable conversion price following the third anniversary of issuance. The Company may also redeem the Series A Preferred Stock following the third anniversary of the issuance.

The Series A Preferred Stock was initially convertible into 1,020,000 shares of common stock (now convertible into 85,000 common shares when adjusted for the one-for-twelve reverse stock split on October 21, 2019). The average of the high and low market prices of the common stock on August 6, 2016, the date of the closing of the sale of the Series A Preferred Stock, was approximately \$39.78 per share. At \$39.78 per share the common stock into which the Series A Preferred Stock was initially convertible was valued at approximately \$3.4 million. This amount was compared to the \$2.8 million of proceeds of the Series A Preferred Stock to indicate that a BCF of approximately \$0.6 million existed at the date of issuance in 2016, which was immediately accreted as a deemed dividend because the conversion rights were immediately effective.

Additionally, comparison of the \$2.7451, original conversion price of the PIK dividends prior to the one-for-twelve reverse stock split on October 21, 2019, to the \$3.315 commitment date fair value per share indicates that each PIK dividend will accrete \$0.5699 of BCF as an additional deemed dividend for every \$2.7451 of PIK dividend accrued. Total deemed dividends for this PIK dividend for the nine months ended September 30, 2019 and year ended December 31, 2018 were approximately \$29,000 and \$41,000, respectively.

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The holders of the Series A Preferred Stock have no voting rights. In addition, as long as 255,000 shares of Series A Preferred Stock are outstanding, the Company may not take certain actions without first having obtained the affirmative vote or waiver of the holders of a majority of the outstanding shares of Series A Preferred Stock. The Company has the option at any time after August 2, 2019 to redeem some or all of the outstanding Series A Preferred Stock for an amount in cash equal to the liquidation preference plus the amount of any accrued but unpaid dividends of the Series A Preferred Stock being redeemed. The holders of the Series A Preferred Stock do not have the ability to require the Company to redeem the Series A Preferred Stock.

On April 30, 2018, the holder of the Series A Preferred Shares converted 111,260 preferred shares into 10,407 common shares.

On September 30, 2018, the holder of the Series A Preferred Shares were issued 61 common shares in payment of the dividend for the month of April 2018. On the same date, the holder of the Series A Preferred Shares converted 95,116 preferred shares into 9,211 common shares.

On April 16, 2019, the holder of the Series A Preferred Shares converted 27,747 preferred shares into the 2,782 common shares.

The accumulated dividend (unpaid) at September 30, 2019 and December 31, 2018 was approximately \$0.5 million and \$0.4 million, respectively. The Series A Preferred Shares outstanding as of September 30, 2019 was 785,877 shares with an aggregate liquidation preference of approximately \$2.7 million, including accumulated dividends, while the Series A Preferred Shares outstanding as of December 31, 2018 was 813,624 shares with an aggregate liquidation preference of approximately \$2.6 million, including accumulated dividends.

Warrants

	September 30, 2019	December 31, 2018
<u>Outstanding Warrants</u>		
Issued to Investors on October 25, 2013, entitling the holders to purchase 20,833 common shares in the Company at an exercise price of \$138.00 per common share up to and including April 24, 2021. In 2016, 4,954 of these warrants were exchanged for common stock, and all remaining warrant holders agreed to new warrant terms, which excluded any potential net cash settlement provisions in exchange for a reduced exercise price of \$75.00 per share.	13,665	13,665
Issued to Investors on November 17, 2014, entitling the holders to purchase 45,577 common shares in the Company at an exercise price of \$138.60 per common share up to and including May 16, 2022. On June 30, 2016, the warrant holders agreed to new warrant terms, which excluded any potential net cash settlement provisions in order to classify them as equity in exchange for a reduced exercise price of \$75.00 per share.	45,577	45,577

Issued to an investment bank and subsequently transferred to a principal of the investment bank regarding the Series B Preferred Stock investment on January 30, 2018, entitling the holder to purchase 11,119 common shares in the Company at an exercise price of \$18.00 per share, up to and including January 30, 2021.

	11,119	11,119
Total	<u>70,361</u>	<u>70,361</u>

Stock-based Compensation – Stock Options

2015 Equity Incentive Plan

On March 25, 2015, the Compensation Committee and Board of Directors approved the Lightbridge Corporation 2015 Equity Incentive Plan (the “2015 Plan”) to authorize grants of (a) Incentive Stock Options, (b) Non-qualified Stock Options, (c) Stock Appreciation Rights, (d) Restricted Awards, (e) Performance Share Awards, and (f) Performance Compensation Awards to the employees, consultants, and directors of the Company. The shares available for award under the 2015 plan are subject to equitable adjustment for the October 21, 2019 reverse stock split described in Note 1. The 2015 Plan initially authorized a total of 50,000 shares to be available for grant under the 2015 Plan, of which the amount was increased to 116,667 shares in May 2016, 241,667 shares in May 2017, and 525,000 shares in May 2018.

Total stock options outstanding at September 30, 2019 and December 31, 2018 under the 2006 Stock Plan and 2015 Plan were 435,979 and 467,013, of which 351,108 and 327,928 of these options were vested at September 30, 2019 and December 31, 2018, respectively.

The components of stock-based compensation expense included in the Company's condensed consolidated statements of operations for the three months and nine months ended September 30, 2019 and 2018 are as follows (rounded in thousands):

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2019	2018	2019	2018
Research and development expenses	\$ -	\$ 162,000	\$ 284,000	\$ 728,000
General and administrative expenses	20,000	368,000	308,000	1,223,000
Total stock-based compensation expense	<u>\$ 20,000</u>	<u>\$ 530,000</u>	<u>\$ 592,000</u>	<u>\$ 1,951,000</u>

Long-Term Non-Qualified Option Grants

In August 2018, the Compensation Committee of the Board of Directors granted long-term non-qualified stock options relating to 146,066 shares to employees, consultants, and directors of the Company. These stock options have a strike price of \$10.80. Out of this total, approximately 128,355 stock options were issued to employees and consultants. These non-qualified stock options contain service, performance, and market conditions of which one must be achieved in order for the options to vest. The service condition vests one-third annually over a 3-year period with accelerated vesting of these options occurring upon applicable performance or market conditions being satisfied by certain milestone dates. Accelerated vesting of these option grants to employees and consultants would occur upon achievement of either of the following performance and market-based milestones:

1. The Company's closing stock price is above \$36 per share for 10 consecutive trading days by December 31, 2019.
2. The Company secures at least \$5 million of funding from the Department of Energy by June 30, 2019.

The remaining approximately 17,711 stock options were service based options issued to the directors of the Company that vest over a one-year period on the anniversary date of the grant. All options granted have a 10-year contractual term.

In accordance with ASC 718, awards with service, market and performance conditions for the employees and consultants were assigned a fair value of \$8.28 per share and the awards with service conditions for the directors of the Company were assigned a fair value of \$8.40 per share (total value of \$1.2 million). The value was determined using a Monte Carlo simulation. The following assumptions were used in the Monte Carlo simulation model:

Expected volatility	90%
Risk free interest rate	2.84%
Dividend yield rate	0%
Weighted average years	0.82 years
Closing price per share – common stock	\$ 10.56

The weighted average years remaining of expected life was itself calculated based on a Monte Carlo simulation under which it was assumed that the options would be exercised, if vested, when the stock reached a price of \$54, otherwise they would be exercised at expiration, if in the money. The Company determined that it was not probable that the outcome of the above performance-based milestone (i.e., DOE funding) would be met prior to the annual vesting dates. In accordance with ASC 718-10-55-104 the Company then based the amortization period for the compensation expense on the shorter of the explicit service periods or the “derived service period” based solely on the market condition.

Stock option transactions to the employees, directors and consultants are summarized as follows for the nine months ended September 30, 2019:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value
Beginning of the period	467,013	\$ 32.64	\$ 23.52
Granted	4,246	8.28	5.89
Exercised	—	—	—
Forfeited	(18,175)	34.32	25.56
Expired	(17,105)	191.78	147.21
End of the period	<u>435,979</u>	<u>\$ 26.15</u>	<u>\$ 18.40</u>
Options exercisable	<u>351,108</u>	<u>\$ 29.88</u>	<u>\$ 20.85</u>

Stock option transactions of the employees, directors, and consultants are summarized as follows for the year ended December 31, 2018:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value
Beginning of the year	331,407	\$ 42.96	\$ 29.88
Granted	148,704	10.80	8.40
Exercised	—	—	—
Forfeited	(11,998)	13.20	9.96
Expired	(1,100)	367.20	253.56
End of the year	<u>467,013</u>	<u>\$ 32.64</u>	<u>\$ 23.52</u>
Options exercisable	<u>327,928</u>	<u>\$ 42.00</u>	<u>\$ 29.88</u>

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A summary of the status of the Company's non-vested options as of September 30, 2019 and December 31, 2018, and changes during the year ended December 31, 2018 and the nine months ended September 30, 2019, is presented below:

	<u>Shares</u>	<u>Weighted- Average Fair Value Grant Date</u>	<u>Weighted Average Exercise Price</u>
Non-vested – December 31, 2017	128,561	\$ 13.20	\$ 18.96
Granted	148,705	8.40	10.80
Vested	(126,183)	15.24	18.96
Forfeited	(11,998)	9.96	13.20
Non-vested – December 31, 2018	139,085	\$ 6.48	\$ 10.92
Granted	4,246	5.89	8.28
Vested	(58,460)	8.37	10.86
Forfeited	—	—	—
Non-vested – September 30, 2019	84,871	\$ 5.16	\$ 10.73

The above tables include options issued and outstanding as of September 30, 2019 as follows:

- i) A total of 9,636 non-qualified 10-year options have been issued, and are outstanding, to advisory board members at exercise prices of \$8.28 to \$336.60 per share.
- ii) A total of 391,915 incentive stock options and non-qualified 10-year options have been issued, and are outstanding, to the directors, officers, and employees at exercise prices of \$10.80 to \$519.00 per share. From this total, 112,968 options are outstanding to the Chief Executive Officer, who is also a director, with remaining contractual lives of 0.4 years to 8.9 years. All other options issued to directors, officers, and employees have a remaining contractual life ranging from 0.4 years to 8.9 years.
- iii) A total of 34,428 non-qualified 3-10-year options have been issued, and are outstanding, to consultants at exercise prices of \$10.80 to \$519.00 per share.

As of September 30, 2019, there was approximately \$47,000 of total unrecognized compensation cost related to non-vested share-based compensation arrangements granted under the plans. That cost is expected to be recognized over a weighted-average period of approximately 2.28 years. For stock options outstanding at September 30, 2019, the intrinsic value was \$2,000. For stock options outstanding at December 31, 2018, the intrinsic value was \$0.

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The following table provides certain information with respect to the above-referenced stock options that were outstanding and exercisable at September 30, 2019:

Exercise Prices	Stock Options Outstanding			Stock Options Vested		
	Weighted Average Remaining Contractual Life -Years	Number of Awards	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life -Years	Number of Awards	Weighted Average Exercise Price
\$ 8.28-\$12.48	8.88	138,947	\$ 10.72	8.85	56,708	\$ 10.80
\$ 12.49-\$24.00	7.82	199,766	\$ 14.19	7.81	197,134	\$ 14.21
\$ 24.01-\$72.00	6.14	65,310	\$ 55.07	6.14	65,310	\$ 55.07
\$ 72.01-\$240.00	4.74	28,995	\$ 75.50	4.74	28,995	\$ 75.50
\$ 240.01-\$519.00	0.88	2,961	\$ 435.71	0.88	2,961	\$ 435.71
Total	7.66	435,979	\$ 26.15	7.36	351,108	\$ 29.88

The following table provides certain information with respect to the above-referenced stock options that were outstanding and exercisable at December 31, 2018:

Stock Options Outstanding	Stock Options Vested
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Exercise Prices	Weighted Average Remaining Contractual Life -Years	Number of Awards	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life -Years	Number of Awards	Weighted Average Exercise Price
\$ 10.80-\$12.48	9.60	134,700	\$ 10.80	—	—	\$ —
\$ 12.49-\$24.00	8.57	213,361	\$ 14.16	8.56	208,976	\$ 14.16
\$ 24.01-\$72.00	6.86	67,799	\$ 55.08	6.86	67,799	\$ 55.08
\$ 72.01-\$240.00	4.16	41,778	\$ 89.76	4.16	41,778	\$ 89.76
\$ 240.01-\$519.00	0.72	9,375	\$ 353.52	0.72	9,375	\$ 353.52
Total	8.07	467,013	\$ 32.64	7.42	327,928	\$ 42.00

Note 8. Related Party Transactions

The Company invested approximately \$0 and \$3.5 million in Enfission during the three months and nine months ended September 30, 2019, respectively. The total administrative consulting services was \$0.3 million for the nine months ended September 30, 2019. This \$0.3 million amount charged to Enfission was recorded as a \$150,000 reduction of general and administrative expenses and a \$150,000 reduction of research and development expenses.

The Company also provided research and development consulting services and management services to Enfission. The total consulting services income was \$0.2 million for the three months ended September 30, 2019 and 2018, and \$0.9 million and \$0.8 million for the nine months ended September 30, 2019 and 2018, respectively, recorded under “Other income from joint venture” in the accompanying condensed consolidated statement of operations.

As of September 30, 2019, and December 31, 2018, the total receivable due from Enfission was approximately \$0.6 million and \$0.1 million, respectively, which represents consulting fees Lightbridge charged to Enfission and reimbursable expenses paid by Lightbridge on Enfission’s behalf.

Note 9. Subsequent Events

Conversion of Series A Preferred Shares to Common Shares

On October 8, 2019, the holder of the Series A Preferred Shares converted 28,107 preferred shares into 2,922 common shares.

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FORWARD-LOOKING STATEMENTS

In addition to historical information, this report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. We use words such as “believe”, “expect”, “anticipate”, “project”, “target”, “plan”, “optimistic”, “intend”, “aim”, “will”, 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;
- any statements regarding possible changes to our joint venture with Framatome;
- 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 of the development of our nuclear fuel technology;
- any statements regarding future economic conditions or performance;

- uncertainties related to conducting business in foreign countries;
- any statements about future financings and liquidity; and
- all assumptions, expectations, predictions, intentions, or beliefs about future events.

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;
- the realization of expected benefits from our joint venture with Framatome Inc. (Enfission, LLC), and our future collaboration with Framatome;
- our ability to attract new customers;
- 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;
- public perception of nuclear energy generally;
- changes in laws, rules, and regulations governing our business;
- development and utilization of, and challenges to, our intellectual property;
- potential and contingent liabilities; and
- the other risks identified in Part II, Item 1A, *Risk Factors* included herein and in our Form 10-K filing.

Most of these factors are beyond our ability to predict or control. 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, except as required by law.

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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 condensed consolidated financial statements and the accompanying notes thereto contained in Part I, Item 1 of this report.

This MD&A consists of the following sections:

- Overview of Our Business and recent developments — a general overview of our business and updates;
- Critical Accounting Policies and Estimates — a discussion of accounting policies that require critical judgments and 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” immediately preceding this MD&A, the following discussion contains forward-looking statements that involve risks, uncertainties, and assumptions such as statements of our plans, objectives, expectations, and intentions. Our actual results may differ materially from those discussed in these forward-looking statements because of the risks and uncertainties inherent in future events.

OVERVIEW OF OUR BUSINESS

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.

Company Overview

Lightbridge is a leading nuclear fuel technology company. Our goal is to produce the next generation of nuclear fuel that could significantly improve the economics, safety, and proliferation resistance of existing and new reactors, with a meaningful impact on addressing climate change and air pollution. We project that the world’s energy and climate needs can only be met if nuclear power’s share of the energy-generating mix grows substantially.

Our primary focus is the development and commercialization of metallic fuel rods that will replace the uranium oxide ceramic pellets that have traditionally fueled nuclear reactors. We believe our metallic fuel offers significant economic and safety benefits over traditional fuel, primarily because of the superior heat transfer properties of all-metal fuel and the resulting lower operating temperature of the reactor. We also believe that uprating a reactor with Lightbridge fuel will add incremental electricity at a lower levelized cost than any other means of generating baseload electric power, including any renewable, fossil, or hydroelectric energy source.

We have built a significant portfolio of patents reflecting years of research and development, and we anticipate substantial completion of our research efforts and the testing of our fuel through Enfission.

From 2008 to 2018, we also had a nuclear consulting business segment, which provided early funding for our metallic nuclear fuel development efforts. We discontinued our consulting business segment in 2018; however, we may opportunistically provide nuclear power consulting and strategic advisory services to commercial and governmental entities worldwide.

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Enfission, LLC

On January 24, 2018 we formed Enfission, LLC (“Enfission”), a 50/50 joint venture with Framatome Inc., to develop, license, manufacture, and sell nuclear fuel assemblies based on Lightbridge-designed metallic fuel technology and other advanced nuclear fuel intellectual property. Framatome Inc. is a wholly-owned US subsidiary of Framatome SAS, which we refer to individually or collectively in this report, together with their affiliates, as Framatome. Framatome is a global leader in designing, manufacturing, and installing components and fuel for nuclear power plants, and Framatome offers a full range of reactor services.

We currently conduct our fuel development activities principally through Enfission. Enfission serves as the exclusive vehicle through which the Company and Framatome are researching, developing, obtaining regulatory approvals, manufacturing and will be using, marketing and selling nuclear fuel assemblies based on the Lightbridge metallic fuel technology comprising uranium-zirconium (U-Zr) multi-lobe, helically twisted fuel rods and associated manufacturing processes and other advanced nuclear fuel intellectual property contributed by both Lightbridge and Framatome within the operating domain. The operating domain of Enfission includes pressurized water reactors (excluding water-cooled water-moderated energetic reactor (Russian VVER) types) and boiling water reactors, which collectively constitute most of the power reactors in the world, as well as water-cooled small modular reactors and water-cooled research reactors. While we expect our focus to be on Enfission for the foreseeable future, Lightbridge maintains the rights to develop fuel for VVER reactors outside Enfission, and Lightbridge also maintains the right to develop fuel for pressurized heavy water reactors (including CANDU reactors) outside Enfission. Lightbridge, as an American-owned and controlled company is also exploring opportunities particularly available to it, such as at US national laboratories.

In addition to distributions from Enfission based on our ownership interest in the joint venture, we anticipate receiving future licensing revenues in connection with sales by Enfission of nuclear fuel incorporating our intellectual property.

Enfission has entered into a phase of the fuel development project that will require both parties of the Enfission joint venture to agree on the future direction of the project and the joint venture. Lightbridge and Framatome have engaged in discussions about possible amendments to the agreements serving as the foundation for the joint venture, which agreements are described below under “—Agreements with Enfission and Framatome.” The Company believes that the proposed amendments may be necessary for the joint venture parties to come to an agreement regarding budget commitments for fiscal years 2019 and 2020, which have not yet been agreed between the parties. In addition, Lightbridge has raised certain issues concerning compliance with the terms of the existing joint venture agreements with Framatome. Negotiations remain ongoing, and there can be no assurance that the joint venture parties will amend the joint venture agreements, resolve issues related to compliance with the existing agreements, or agree on budget commitments, including for the current year. If Lightbridge and Framatome are unable to resolve these matters, future development work will likely be scaled back or delayed, and the goals of the joint venture could be frustrated.

Lightbridge and Enfission’s principal executive offices are located at 11710 Plaza America Drive, Suite 2000, Reston, Virginia 20190 USA.

Ownership and Management of Enfission

Lightbridge owns 50 percent of Enfission’s Class A voting membership units and Framatome owns the other 50 percent. Any distributions will be first allocated to cause the capital accounts of the initial members to be equal, then allocated on a 50/50 basis. Lightbridge and Framatome each provided certain intellectual property to Enfission. Certain additional capital contributions made by Lightbridge and Framatome will partly be in the form of exclusive license rights to intellectual property developed pursuant to a research and development services agreement with Enfission.

Seth Grae, our Chief Executive Officer, also serves as Chief Executive Officer of Enfission. Enfission is managed by a board of directors composed of six directors, half of whom are appointed by Lightbridge and the other half are appointed by Framatome. The Enfission board acts by majority vote, provided that at least one director appointed by each of Lightbridge and Framatome votes in favor of the action. Certain major decisions require the approval of at least two-thirds of the directors, and certain fundamental decisions, including amending the Enfission operating agreement and issuing additional membership units, require the approval of two-thirds of the Class A members.

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Agreements with Enfission and Framatome

Enfission has entered into several agreements with Lightbridge and Framatome relating to intellectual property, the provision of personnel and administrative support to Enfission, and research and development efforts.

Lightbridge and Framatome have also directly entered into binding agreements forming the foundation for Enfission, including the following agreements in November 2017, which govern joint research and development activities and the treatment of all related existing and future intellectual property:

- R&D Services Agreement (“RDSA”) — The RDSA defines the terms and conditions for joint research and development activities between Framatome and Lightbridge. Enfission is a party to the RDSA. Key terms and conditions of the RDSA include: (i) designating a 17x17 fuel assembly as the first joint project of the parties; (ii) establishing a framework for future work release orders relating to research and development activities of the parties; and (iii) granting rights to the use of background and foreground intellectual property needed to perform research and development activities.
- Co-Ownership Agreement (“COA”) — The COA governs the co-ownership between Framatome and Lightbridge of the foreground information developed by and between Framatome and Lightbridge, with one another and through Enfission. The COA will survive the life of Enfission. The COA is limited to a domain consisting of the metallic fuel developed by Enfission for the following types of commercial light water reactors and research reactors: (i) pressurized water reactors, excluding water-cooled water-moderated energetic reactor (VVER) types, (ii) boiling water reactors, (iii) light water-cooled small and medium size reactors, and (iv) water-cooled research reactors. The domain expressly excludes maritime, naval, and military applications.
- Intellectual Property Annex (“IP Annex”) — The IP Annex is a higher-level reference document attached to the Enfission operating agreement and summarizes the parties’ understanding regarding intellectual property matters. The IP Annex will remain in force only during the life of Enfission.

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Nuclear Power as Clean and Low Carbon Emissions Energy Source

Nuclear power provides clean, reliable baseload electricity. According to the World Nuclear Association (WNA), nuclear power plants produce no greenhouse gas emissions during operation, and over the course of its life-cycle, nuclear produces about the same amount of CO₂ equivalent emissions per unit of electricity as wind. The WNA further notes that almost all proposed pathways to achieving significant decarbonization suggest an increased role for nuclear power, including those published by the International Energy Agency, Massachusetts Institute of Technology Energy Initiative, US Energy Information Administration, and World Energy Council.

We believe that deep cuts to CO₂ emissions are only possible with electrification of most of the transportation and industrial sectors globally and powering them and the current electricity needs of the world with non-emitting or low-emitting power. We believe this can be done only with a large increase in nuclear power, several times the amount that is generated globally today. We believe that our nuclear fuel technology will be an essential element of reaching this goal.

Nuclear Fuel Development

Since 2008, we have been engaged in the design and development of proprietary, innovative nuclear fuels to improve the cost competitiveness, safety, proliferation resistance and performance of nuclear power generation. In 2010, we announced the concept of all-metal fuel (i.e., non-oxide fuel) for currently operating as well as new-build reactors. Our focus on metallic fuel is based on listening to the voices of prospective customers, as nuclear utilities have expressed interest in the improved economics and enhanced safety that we believe metallic fuel can provide.

The fuel in a nuclear reactor generates heat energy. That heat is then converted through steam into electricity that is sold. We have designed our innovative, proprietary metallic fuels to be capable of significantly higher burnup and power density compared to conventional oxide nuclear fuels. Burnup is the total amount of electricity generated per unit mass of nuclear fuel and is a function of the power density of a nuclear fuel and the amount of time the fuel operates in the reactor. Power density is the amount of heat power generated per unit volume of nuclear fuel. Conventional oxide fuel used in existing commercial reactors is just about at the limit of its burnup and power density capability. As a result, further optimization to increase power output from the same core size and improve the economics and safety of

nuclear power generation using conventional oxide fuel technologies is limited. A new fuel is needed to bring enhanced performance to reactors; we are developing that new fuel.

As the nuclear industry prepares to meet the increasing global demand for electricity production, longer operating cycles and higher reactor power outputs have become a much sought-after solution for the current and future reactor fleet. We believe our proprietary nuclear fuel designs have the potential to improve the nuclear power industry's economics by:

- providing an increase in power output of potentially up to 10% while simultaneously extending the operating cycle length from 18 to 24 months in existing pressurized water reactors (PWRs), including in Westinghouse-type four-loop PWR plants which are currently constrained to an 18-month operating cycle by oxide fuel, or increasing the power potentially up to 17% while retaining an 18-month operating cycle;
- enabling increased reactor power output via a power uprate (potentially up to a 30% increase) or a longer operating cycle (instead of a power uprate) without changing the core size in new build PWRs; and
- reducing the volume of spent fuel per unit of electricity generated as well as enhancing proliferation resistance of spent fuel.

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We believe our fuel designs will allow current and new build nuclear reactors to safely increase power production and reduce operations and maintenance costs on a per kilowatt-hour basis. New build nuclear reactors could also benefit from the reduced upfront capital investment per kilowatt of generating capacity in case of implementing a power uprate. In addition to the projected electricity production cost savings, we believe that our technology can result in utilities or countries needing to deploy fewer new reactors to generate the same amount of electricity (in case of a power uprate), resulting in significant capital cost savings. For utilities or countries that already have operating reactors, our technology could be utilized to increase the power output of those reactors as opposed to building new reactors.

Due to the significantly lower fuel operating temperature, our metallic nuclear fuel rods are also expected to provide major improvements to safety margins during off-normal events. US Nuclear Regulatory Commission licensing processes require engineering analysis of a large break loss-of-coolant accident (LOCA), as well as many other scenarios. The LOCA scenario assumes failure of a large water pipe in the reactor coolant system. Under LOCA conditions, the fuel and cladding temperatures rise due to reduced cooling capacity. Preliminary analytical modeling shows that under a design-basis LOCA scenario, unlike conventional uranium dioxide fuel, the cladding of the Lightbridge-designed metallic fuel rods would stay at least 200 degrees below the 850-900 degrees Celsius temperature at which steam begins to react with the zirconium cladding to generate hydrogen gas. Build-up of hydrogen gas in a nuclear power plant can lead to the hydrogen exploding, which is what happened at the Fukushima Daiichi nuclear power plant in Japan in 2011. Lightbridge fuel is designed to prevent hydrogen gas generation in design-basis LOCA situations, which is a major safety benefit.

The Company plans to conduct the initial testing and demonstration of its advanced metallic nuclear fuel in the United States.

Recent Research and Development Advancements

- Demonstrated co-extrusion manufacturing process using surrogate materials to full commercial length for large light water reactors (12-ft long), as well as for small modular reactors (6-ft long). The surrogate materials were designed to simulate the flow stresses, temperatures and extrusion pressures expected in the manufacture of the Lightbridge Fuel™ rods utilizing a uranium-zirconium alloy.
- Defined lead test rod (LTR) high-level design requirements. This is key input for the technical scope of an LTR contract with a host utility.
- Completed critical heat flux (CHF) performance evaluation of the LTR. CHF is a critical element of thermal-hydraulic design and safety evaluations.
- Completed neutronics analysis of baseline fuel assembly behavior. This is a necessary step before a neutronics analysis of the entire core can be performed.

Future Steps Toward the Development and Sale of Nuclear Fuel Assemblies

In the near-term, Enfission will seek to enter into a lead test rod agreement with a US electric utility within the next several months. Enfission plans to enter into an agreement to manufacture fuel material samples for test reactor irradiation over the next 12 months. Please see Item 1A, *Risk Factors* in our Annual Report on Form 10-K filed on March 29, 2019 for a discussion of certain risks that may delay or impair such developments including without limitation the availability of financing, reliance on cooperation from Framatome within Enfission, and the many risks inherent in developing a new type of nuclear fuel. The Company has entered into a phase of the fuel development project that will require both parties of the Enfission joint venture to agree on the future direction of the project, in order for the fuel development project in Enfission to move forward and discussions between the Company and Framatome are ongoing about the future direction of the joint venture. In particular, the joint venture parties are still negotiating a budget commitment for the remainder of fiscal year 2019 and fiscal year 2020 and future development work could be scaled back or delayed until the parties agree on a budget commitment with an associated scope of work.

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The long-term milestones towards Enfission's development and sale of nuclear fuel assemblies include, among other things, developing the capacity and know-how to fabricate lead test assemblies incorporating our nuclear fuel technology, irradiating material samples, performing out-of-reactor corrosion experiments, and demonstrating operation of lead test rods and/or lead test assemblies in commercial reactors. Beyond the near-term developments discussed above, there is inherent uncertainty 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 predict the timing of the commercialization of

our nuclear fuel technology with any accuracy. Going forward, we intend to disclose estimated timing concerning particular developments as we develop greater visibility into such developments.

CRITICAL ACCOUNTING POLICIES AND 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 Policies and Estimates” under Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K filed on March 29, 2019. There have been no significant changes in our critical accounting policies and estimates during the nine months ended September 30, 2019.

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.

Recent Accounting Standards and Pronouncements

Refer to Note 1 of the Notes to our unaudited condensed consolidated financial statements for a discussion of recent accounting standards and pronouncements.

OPERATIONS REVIEW

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

Our goal is to develop and commercialize innovative, proprietary nuclear fuel designs, which we expect will significantly enhance the nuclear power industry’s economics due to higher power output and improved safety margins.

We are focusing our technology development efforts on the metallic fuel with a potential power uprate of up to 10% and an operating cycle extended from 18 to 24 months in existing Westinghouse-type four-loop pressurized water reactors. Those reactors represent the largest segment of our global target market. The metallic fuel could also be adapted for use in other types of water-cooled commercial power reactors, such as boiling water reactors, Russian-type VVER reactors, CANDU heavy water reactors, water-cooled small and modular reactors, as well as water-cooled research reactors.

We have obtained and will continue to seek patent validation in key countries that either currently operate or are expected to build and operate a large number of suitable nuclear power reactors.

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Condensed Consolidated Results of Operations – Three Months Ended September 30, 2019 and 2018

The following table presents our historical operating results and the increase (decrease) in amounts for the periods indicated:

	Three Months Ended September 30,		Increase (Decrease)	Increase (Decrease)
	2019	2018	Change \$	Change %
Revenues	\$ —	\$ —	\$ —	—
Operating Expenses				
General and administrative expenses	\$ 1,463,568	\$ 1,889,401	\$ (425,833)	-23 %
Research and development expenses	\$ 751,473	\$ 864,060	\$ (112,587)	-13 %
Total Operating Expenses	\$ 2,215,041	\$ 2,753,461	\$ (538,420)	-20%
Other Operating Income and (Loss)				
Other income from joint venture	\$ 247,568	\$ 203,180	\$ 44,388	22%
Equity in loss from joint venture	\$ (555,113)	\$ (1,743,340)	\$ (1,188,227)	-68 %
Total Other Operating Income and (Loss)	\$ (307,545)	\$ (1,540,160)	\$ (1,232,615)	-80 %
Total Operating Loss	\$ (2,522,586)	\$ (4,293,621)	\$ (1,771,035)	-41 %
Other Income and (Expenses)	\$ 81,172	\$ 79,035	\$ 2,137	3%
Net loss - before income taxes	\$ (2,441,414)	\$ (4,214,586)	\$ (1,773,172)	-42 %
Net loss	\$ (2,441,414)	\$ (4,214,586)	\$ (1,773,172)	-42 %

Revenue

The market for nuclear industry consulting services is competitive, fragmented, and subject to rapid change. Our main business is developing our nuclear fuel. We may pursue some consulting services opportunities in the future, but we have further increased the focus and resources of the Company to the fuel division and away from consulting. There was no revenue for the three months ended September 30, 2019 and 2018.

General and Administrative Expenses

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

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Total general and administrative expenses decreased by approximately \$0.4 million for the three months ended September 30, 2019, as compared to the three months ended September 30, 2018. There was a decrease in stock-based compensation of approximately \$0.3 million due to the decrease in stock option expense for prior stock option awards, and a decrease in professional fees of approximately \$0.2 million due to decrease in legal fees, accounting fees and other professional fees, which was offset by an increase in employee compensation and employee benefits of approximately \$0.1 million due to an increase in the number of employees and employee compensation. Total stock-based compensation included in general and administrative expenses was approximately \$20,000 and \$368,000 for the three months ended September 30, 2019 and 2018, respectively.

See Note 7. Stockholders' Equity and Stock-Based Compensation of the Notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for more information regarding our stock-based compensation.

Research and Development

Corporate research and development expenses consist primarily of compensation and related fringe benefits including stock-based compensation and related allocable overhead costs for the research and development of our fuel, including work performed and billed to our Enfission joint venture. Total research and development expenses decreased by approximately \$0.1 million for the three months ended September 30, 2019, as compared to the three months ended September 30, 2018.

There was a decrease in professional fees of approximately \$0.1 million and a decrease in stock-based compensation of approximately \$0.2 million, which was offset by an increase in employee compensation and employee benefits in supporting research and development activities for Enfission of approximately \$0.2 million. Total stock-based compensation included in research and development expenses was approximately \$0 and \$0.2 million for the three months ended September 30, 2019 and 2018, respectively.

Due to the nature of these research and development expenditures, cost and schedule estimates are inherently uncertain and can vary significantly as new information and the outcome of these research and development activities become available.

Other Operating Income and (Loss)– Related Party

Reported in other operating income is other income for activities performed by our employees and consultants billed to the Enfission joint venture for research and development work and our share of the allocated loss in Enfission. Total other operating income and (loss) decreased by approximately \$1.2 million for the three months ended September 30, 2019, as compared to the three months ended September 30, 2018.

Other income from joint venture for the three months ended September 30, 2019 and 2018 was approximately \$0.2 million. As of September 30, 2019, approximately 76% of the total Enfission cash inflow or capital contributions into Enfission were funded by Lightbridge (approximately \$9.1 million) and the remaining 24% was funded as capital contributions into Enfission from Framatome (approximately \$2.9 million).

Equity in loss from joint venture for the three months ended September 30, 2019 and 2018 were approximately \$0.5 million and \$1.7 million, respectively, which consists of our share of the allocated loss in Enfission. The decrease in the share of loss in Enfission was due to less research and development expenses incurred by Enfission and a decrease in the loss allocated to Lightbridge for the quarter ended September 30, 2019.

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Other Income (Expenses)

Other income for the three months ended September 30, 2019 and 2018 were approximately \$0.1 million, which consists of interest income generated from the interest earned from the purchase of treasury bills and from our bank savings account for the three months ended September 30, 2019 and 2018.

Provision for Income Taxes

We incurred a pre-tax net loss for both 2019 and 2018. We reviewed all sources of income for purposes of recognizing the deferred tax assets and concluded a full valuation allowance for 2019 and 2018 was necessary. Therefore, we did not have a provision for taxes for the three months ended September 30, 2019 and 2018.

Condensed Consolidated Results of Operations – Nine Months Ended September 30, 2019 and 2018

The following table presents our historical operating results and the increase (decrease) in amounts for the periods indicated:

	Nine Months Ended		Increase (Decrease) Change \$	Increase (Decrease) Change %
	September 30, 2019	2018		
Revenues	\$ —	\$ —	\$ —	—
Operating Expenses				
General and administrative expenses	\$ 4,051,484	\$ 5,566,022	\$ (1,514,538)	-27%
Research and development expenses	\$ 2,218,826	\$ 2,313,124	\$ (94,298)	-4%
Total Operating Expenses	\$ 6,270,310	\$ 7,879,146	\$ (1,608,836)	-20%
Other Operating Income and (Loss)				
Other income from joint venture	\$ 908,224	\$ 790,554	\$ 117,670	15%
Equity in loss from joint venture	\$ (3,812,463)	\$ (4,545,112)	\$ (732,649)	-16%
Total Other Operating Income and (Loss)	\$ (2,904,239)	\$ (3,754,558)	\$ (850,319)	-23%
Total Operating Loss	\$ (9,174,549)	\$ (11,633,704)	\$ (2,459,155)	-21%
Other Income and (Expenses)	\$ 315,691	\$ (819,382)	\$ 1,135,073	139%
Net loss - before income taxes	\$ (8,858,858)	\$ (12,453,086)	\$ (3,594,228)	-29%
Net loss	\$ (8,858,858)	\$ (12,453,086)	\$ (3,594,228)	-29%

Revenue

The market for nuclear industry consulting services is competitive, fragmented, and subject to rapid change. Our main business is developing our nuclear fuel. We may pursue some consulting services opportunities in the future, but we have further increased the focus and resources of the Company to the fuel division and away from consulting. There was no revenue for the nine months ended September 30, 2019 and 2018.

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

Total general and administrative expenses decreased by approximately \$1.5 million for the nine months ended September 30, 2019, as compared to the nine months ended September 30, 2018. There was a decrease in stock-based compensation of approximately \$0.9 million due to the acceleration of the vesting of stock options awarded in 2018, and a decrease in professional fees of approximately \$0.8 million due to decrease in legal fees, accounting fees and other professional fees, which was offset by an increase in employee compensation and employee benefits of approximately \$0.2 million due to an increase in the number of employees and employee compensation. Total stock-based compensation included in general and administrative expenses was approximately \$0.3 million and \$1.2 million for the nine months ended September 30, 2019 and 2018, respectively.

See Note 7. Stockholders' Equity and Stock-Based Compensation of the Notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for more information regarding our stock-based compensation.

Research and Development

Corporate research and development expenses consist primarily of compensation and related fringe benefits including stock-based compensation and related allocable overhead costs for the research and development of our fuel, including work performed and billed to our Enfission joint venture. Total research and development expenses decreased by approximately \$0.1 million for the nine months ended September 30, 2019, as compared to the nine months ended September 30, 2018.

There was a decrease in stock-based compensation of approximately \$0.4 million, which was offset by an increase in consulting fees in supporting research and development activities for Enfission of approximately \$0.2 million and an increase in employee compensation and employee benefits in supporting research and development activities for Enfission of approximately \$0.1 million. Total stock-based compensation included in research and development expenses was approximately \$0.3 million and \$0.7 million for the nine months ended September 30, 2019 and 2018, respectively.

Due to the nature of these research and development expenditures, cost and schedule estimates are inherently uncertain and can vary significantly as new information and the outcome of these research and development activities become available.

Other Operating Income and (Loss) – Related Party

Reported in other operating income is other income for activities performed by our employees and consultants billed to the Enfission joint venture for research and development work and our share of the allocated loss in Enfission. Total other operating income and (loss) decreased by approximately \$0.9 million for the nine months ended September 30, 2019, as compared to the nine months ended September 30, 2018.

Other income from joint venture for the nine months ended September 30, 2019 and 2018 were approximately \$0.9 million and \$0.8 million, respectively. Equity in loss from joint venture for the nine months ended September 30, 2019 and 2018 were \$3.8 million and \$4.5 million, respectively, which consists of our share of the allocated loss in Enfission. The decrease in the share of loss in Enfission was due to less research and development expenses incurred by Enfission and a decrease in the loss allocated to Lightbridge for the nine months ended September 30, 2019.

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Other Income (Expenses)

There was a net decrease in other expenses of approximately \$1.1 million. This change was due to a decrease in amortization of deferred financing costs of approximately \$1.0 million due to the write-off of the deferred financing costs in the first quarter of 2018 for the expired equity line option agreement, and an increase of \$0.1 million in interest income generated from the interest earned from the purchase of treasury bills and from our bank savings account for the nine months ended September 30, 2019, as compared to the nine months ended September 30, 2018.

Provision for Income Taxes

We incurred a pre-tax net loss for both 2019 and 2018. We reviewed all sources of income for purposes of recognizing the deferred tax assets and concluded a full valuation allowance for 2019 and 2018 was necessary. Therefore, we did not have a provision for taxes for the nine months ended September 30, 2019 and 2018.

LIQUIDITY, CAPITAL RESOURCES AND FINANCIAL POSITION

At September 30, 2019, we had cash and cash equivalents of approximately \$20.6 million, as compared to approximately \$24.6 million at December 31, 2018, a \$4.0 million decrease in cash and cash equivalents. The cash inflow of approximately \$3.8 million resulted from net proceeds from the sale of approximately 0.5 million shares of common stock during the nine months ended September 30, 2019. This cash inflow was offset by net cash used in operating activities of approximately \$4.1 million and our cash used in investing activities for our capital investment in Enffission and patent filing costs of approximately \$3.7 million. We used cash during the nine months ended September 30, 2019 primarily to fund our research and development expenses and general and administrative expenses. We did not have any consulting revenue for the nine months ended September 30, 2019 and presently do not expect to have consulting revenue for the next 12 months.

We currently project a negative cash flow from operations averaging approximately \$0.8 million per month for our general and administrative and corporate research and development expenses for total expected expenditures of approximately \$9.6 million for the next 12 months. In addition, we currently anticipate the amount of cash outlays to Enffission and third parties for research and development expenditures for our nuclear fuel products to be approximately \$6 million to \$8 million over the next 12 to 15 months. The Company believes that its current financial resources, as of the date of the issuance of the accompanying financial statements, are sufficient to fund its current 12 month operating budget, alleviating the substantial doubt raised by our historical operating results and satisfying our estimated liquidity needs 12 months from the issuance of the accompanying financial statements.

We can provide no assurances about meeting our budgeted expenditures regarding our future research and development efforts for the next 12 months and beyond, as well as predicting future market trends in nuclear that can affect the future sale of our nuclear fuel. Furthermore,

any negative results from our research and development may require us to increase our research and development spending to achieve our desired milestones in developing our nuclear fuel. Presently, we fund substantially all of the cash that is required for the research and development activities to be conducted in Enfission. These additional capital needs relate to the development, manufacturing, and commercialization of our nuclear fuel assemblies. We have the ability to delay incurring certain operating expenses in the next 12 to 15 months, which could reduce our cash flow shortfall, if needed.

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To maintain our Nasdaq listing, we executed a one-for-twelve reverse stock split of our issued and outstanding common stock, which became effective on October 21, 2019. On November 4, 2019, we received written notification from the Nasdaq Listing Qualifications Staff indicating that we regained compliance with the minimum bid price requirement for continued listing on the Nasdaq Capital Market. The current primary sources of cash available to us for the next 12 months are potential funding from equity investments, including our 2019 ATM. We have no debt or debt credit lines and we have financed our operations to date through our prior years' consulting revenue margins and the sale of our preferred stock and common stock. Management believes that public or private equity investments will be available in the future, however adverse market conditions in our common stock price and trading volume, as well as other factors could substantially impair our ability to raise capital in the future.

Short-Term and Long-Term Liquidity Sources

As discussed above, we will seek new financing bringing us additional sources of capital, depending on the capital market conditions of our common stock, over the next 12 months. There can be no assurance that these additional sources of capital will be made available to us. The primary potential sources of cash that may be available to us are as follows:

- Equity or debt investment from third party investors in Lightbridge or Enfission; and
- Strategic investment to support the remaining research and development activities required to further enhance and complete the development of our fuel products to a commercial stage.

In support of our long-term business plan with respect to our fuel technology business, we endeavor to create strategic alliances with other parties during the next three years, to support the remaining research and development activities through Enfission that is required to further enhance and complete the development of our fuel products to a commercial stage. We may be unable to form such strategic alliances on

terms acceptable to us or at all.

See Note 7. Stockholders' Equity and Stock-Based Compensation of the Notes to our unaudited condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q for information regarding our prior financings and 2019 ATM.

Off Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity or capital expenditures or capital resources that is material to an investor in our securities.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not Required.

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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 not effective as of September 30, 2019 due to the material weakness in internal control over financial reporting described

below.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

In connection with the preparation of our unaudited condensed consolidated financial statements included elsewhere herein, we identified a material weakness in internal control over financial reporting. Specifically, we did not design an effective control to review the equity method investment balance as it relates to the review of the allocation of our proportionate share of the equity loss reported in our investee's (Enfission) financial statements.

This material weakness resulted in a material error correction related to the equity method investment presented in our condensed consolidated balance sheets and condensed consolidated statements of loss and shareholders' equity for the period ended September 30, 2019. Notwithstanding the material weakness, there were no restatements of prior period financial statements, and no changes in previously released financial results were required as a result of the material weakness.

Remediation

Our management has been enhancing our existing control process that entails a detailed review of the allocation of our proportionate share of the equity loss reported in our investee's (Enfission) financial statements to the financial statement balances of our investee. We expect that the remediation of the material weakness will be completed by the end of fiscal 2019.

Changes in Internal Control Over Financial Reporting

Other than the changes resulting from the remediation activities described above, there were no changes in the Company's internal control over financial reporting during the third quarter of 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

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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. The Company is not involved in any material legal proceedings.

ITEM 1A. RISK FACTORS

There have been no material changes to our risk factors from the risk factors previously disclosed in the 2018 Annual Report.

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

None

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ITEM 6. EXHIBITS

EXHIBIT INDEX

Exhibit Number	Description
<u>3.1</u>	<u>Articles of Incorporation of Lightbridge Corporation, as amended through October 21, 2019</u>
<u>31.1</u>	<u>Rule 13a-14(a)/15d-14(a) Certification - Principal Executive Officer</u>
<u>31.2</u>	<u>Rule 13a-14(a)/15d-14(a) Certification - Principal Financial Accounting Officer</u>
<u>32</u>	<u>Section 1350 Certifications</u>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF XBRL Taxonomy Extension Definition Linkbase Document

101.LAB XBRL Taxonomy Extension Label Linkbase Document

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

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SIGNATURES

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

LIGHTBRIDGE CORPORATION

Date: November 5, 2019

By: /s/ Seth Grae

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

By: /s/ Larry Goldman

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

**ARTICLES OF INCORPORATION
OF
LIGHTBRIDGE CORPORATION**

As amended through October 21, 2019

1. **Name of Corporation.** The name of this corporation is Lightbridge Corporation.
 2. **Resident Agent.** The resident agent of this corporation in Nevada is CSC Services Of Nevada, Inc. whose address is 2215-B Renaissance Drive, Las Vegas, Clark County, Nevada 89119.
 3. **Purposes; Powers.** The purposes for which the corporation is formed and its powers are:
 - 3.1 To conduct such business as is lawful.
 - 3.2 To purchase, acquire, hold, mortgage, sell, let, lease or otherwise dispose of or deal in real or personal property of every kind, character and description, and to erect, manage, care for, maintain, extend or alter buildings or structures of any kind or character on real property.
 - 3.3 To purchase or otherwise acquire, hold and/or reissue the shares of its capital stock.
 - 3.4 To raise, borrow and secure the payment of money in any lawful manner, including the issue and sale or other disposition of bonds, warrants, debentures, obligations, negotiable and transferable instruments and evidences of indebtedness of all kinds, whether secured by mortgage, pledge, deed of trust, or otherwise, and incur debt in the purchase or acquisition of property, businesses, rights or franchises, or for additional working capital or for any other object connected with its business or affairs, without limit as to amount.
 - 3.5 To enter into, make, perform and carry out contracts of every sort and kind with any person, firm, association, corporation, private, public or municipal or body politic.
 - 3.6 To guarantee any dividends or bonds or contracts or other obligations.
 - 3.7 To have one or more offices or agencies and keep such books of the company outside of Nevada as are not required by law to be kept in Nevada.
 4. **Authorized Capital.** The aggregate number of shares that the corporation will have authority to issue is eighteen million, three hundred thirty-three thousand, three hundred and thirty-three (18,333,333), of which eight million, three hundred thirty-three thousand, three hundred and thirty-three (8,333,333) shares will be common stock, with a par value of \$0.001 per share, and ten million (10,000,000) shares will be preferred stock, with a par value of \$0.001 per share. This preferred stock may be divided into and issued in series, each of which shall be so designated as to distinguish the shares thereof from the shares of all other series and classes. The board of directors of the corporation is authorized, within any limitations prescribed by law, to fix and determine the designations, qualifications, preferences, limitations and terms of the shares of any series of preferred stock.
-
5. **Stock Nonassessable.** The capital stock of this corporation shall not be subject to assessment to pay the debts of the corporation, and in this particular the Articles of Incorporation shall not be subject to amendment.
 6. **Board of Directors.** The members of the governing board shall be styled "Directors" and their number shall not be less than one (1) nor more than fifteen (15).
 7. **Liability of Directors and Officers.** No director or officer shall have personal liability to the corporation or its shareholders for damages for breach of fiduciary duty as a director or officer, but nothing herein shall eliminate or limit the liability of a director or officer for: 7.1 Acts or omissions not in good faith; 7.2 Acts or omissions which involve intentional misconduct, fraud or violation of law; 7.3 Acts or omissions in breach of the director's or officer's duty of loyalty to the corporation or its shareholders; 7.4 Acts or omissions from

which the director or officer derived an improper personal benefit; or 7.5 Payment of dividends in violation of law.

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

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

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

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 5, 2019

By: /s/ Seth Grae
Seth Grae
Principal Executive Officer

Certification of Principal Financial Officer

I, Larry Goldman, certify that:

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

Date: November 5, 2019

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, 2019, 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 5, 2019

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)