

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, 2018**

☐ 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)

(Former Name, Former Address and Former Fiscal Year if Changed Since Last Report)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

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

Large Accelerated Filer

☐

Accelerated Filer

☐

Non-Accelerated Filer

☐

Smaller reporting company

☒

(Do not check if a smaller reporting company)

Emerging growth company

☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

The number of shares outstanding of the issuer's common stock, as of October 18, 2018 is as follows:

Class of Securities

Common Stock, \$0.001 par value

Shares Outstanding

31,184,228

LIGHTBRIDGE CORPORATION
FORM 10-Q
SEPTEMBER 30, 2018

Page

PART I – FINANCIAL INFORMATION

Item 1.	Financial Statements (unaudited)	
	Condensed Consolidated Balance Sheets as of September 30, 2018 (unaudited) and December 31, 2017	3
	Condensed Consolidated Statements of Operations for the three months and nine months ended September 30, 2018 and 2017 (unaudited)	4
	Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2018 and 2017 (unaudited)	5
	Condensed Consolidated Statement of Changes in Stockholders' Equity for the year ended December 31, 2017 (audited) and for the quarterly periods ended September 30, 2018 (unaudited)	6
	Notes to Condensed Consolidated Financial Statements (unaudited)	7
	Forward - Looking Statements	25
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	26
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	40
Item 4.	Controls and Procedures	40

PART II – OTHER INFORMATION

Item 1.	Legal Proceedings	41
Item 1A.	Risk Factors	41
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	41
Item 3.	Defaults Upon Senior Securities	41
Item 4.	Mine Safety Disclosures	41
Item 5.	Other Information	41
Item 6.	Exhibits	42
<u>SIGNATURES</u>		43

PART I—FINANCIAL INFORMATION

Lightbridge Corporation
Condensed Consolidated Balance Sheets

	September 30, 2018	December 31, 2017
	(Unaudited)	
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 25,328,649	\$ 4,515,398
Accounts receivable - project revenue and reimbursable project costs	-	10,400
Other receivable from joint venture	521,272	-
Prepaid expenses and other current assets	121,201	70,067
Deferred financing costs, net	-	491,168
Total Current Assets	<u>25,971,122</u>	<u>5,087,033</u>
Investment in Joint Venture	<u>671,888</u>	<u>-</u>
Other Assets		
Patent costs	1,539,881	1,367,692
Deferred financing costs, net	-	491,268
Total Other Assets	<u>1,539,881</u>	<u>1,858,960</u>
Total Assets	<u>\$ 28,182,891</u>	<u>\$ 6,945,993</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 1,389,124	\$ 1,151,210
Total Current Liabilities	<u>1,389,124</u>	<u>1,151,210</u>
Total Liabilities	<u>1,389,124</u>	<u>1,151,210</u>
Commitments and Contingencies – Note 5		
Stockholders' Equity		
Preferred stock, \$0.001 par value, 10,000,000 authorized shares:		
Convertible Series A preferred shares, 813,624 shares and 1,020,000 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively (liquidation preference \$2,595,441 and \$3,088,764 at September 30, 2018 and December 31, 2017, respectively)	813	1,020
Convertible Series B preferred shares, 2,666,667 and 0 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively (liquidation preference \$4,186,667 at September 30, 2018)	2,667	-
Common stock, \$0.001 par value, 100,000,000 authorized, 30,500,935 shares and 12,737,703 shares issued and outstanding as of September 30, 2018 and December 31, 2017, respectively	30,501	12,738
Additional paid-in capital	127,034,386	93,602,539
Accumulated deficit	<u>(100,274,600)</u>	<u>(87,821,514)</u>
Total Stockholders' Equity	<u>26,793,767</u>	<u>5,794,783</u>
Total Liabilities and Stockholders' Equity	<u>\$ 28,182,891</u>	<u>\$ 6,945,993</u>

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

Lightbridge Corporation
Unaudited Condensed Consolidated Statements of Operations

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenue				
Consulting Revenue	\$ -	\$ 15,136	\$ -	\$ 165,046
Cost of Consulting Services Provided	-	9,364	-	99,027
Gross Margin	-	5,772	-	66,019
Operating Expenses				
General and administrative	1,889,401	1,149,847	5,566,022	3,329,440
Research and development	864,060	458,663	2,313,124	1,468,650
Total Operating Expenses	2,753,461	1,608,510	7,879,146	4,798,090
Other Operating Income and (Loss)				
Other income from joint venture	203,180	-	790,554	-
Equity in loss from joint venture	(1,743,340)	-	(4,545,112)	-
Total Other Operating Income and (Loss)	(1,540,160)	-	(3,754,558)	-
Operating Loss	(4,293,621)	(1,602,738)	(11,633,704)	(4,732,071)
Other Income and (Expenses)				
Interest income	79,035	-	163,054	-
Financing costs	-	(130,828)	(982,436)	(384,509)
Other income	-	17	-	61
Total Other Income and (Expenses)	79,035	(130,811)	(819,382)	(384,448)
Loss Before Income Taxes	(4,214,586)	(1,733,549)	(12,453,086)	(5,116,519)
Income Taxes	-	-	-	-
Net Loss	\$ (4,214,586)	\$ (1,733,549)	\$ (12,453,086)	\$ (5,116,519)
Accumulated Preferred Stock Dividend	(119,000)	(49,000)	(333,667)	(147,000)
Deemed additional dividend on preferred stock dividend due the beneficial conversion feature	(49,373)	-	(135,053)	-
Deemed dividend on issuance on Series B convertible preferred stock due to beneficial conversion feature	-	-	(2,624,836)	-
Net Loss Attributable to Common Stockholders	(4,382,959)	(1,782,549)	(15,546,642)	(5,263,519)
Net Loss Per Common Share, Basic and Diluted	\$ (0.15)	\$ (0.16)	\$ (0.63)	\$ (0.53)
Weighted Average Number of Common Shares Outstanding	29,506,791	10,836,115	24,851,212	9,968,425

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

[Table of Contents](#)

Lightbridge Corporation
Unaudited Condensed Consolidated Statements of Cash Flows

	Nine Months Ended September 30,	
	2018	2017
Operating Activities		
Net Loss	\$ (12,453,086)	\$ (5,116,519)
Adjustments to reconcile net loss from operations to net cash used in operating activities:		
Stock-based compensation	1,951,394	598,485
Amortization of deferred financing cost	-	368,414
Abandonment loss	-	109,752
Write off of deferred financing costs	982,436	-
Equity in loss from joint venture	4,545,112	-
Changes in operating working capital items:		
Accounts receivable - fees and reimbursable project costs	10,400	373,298
Other receivable from joint venture	(521,272)	-
Prepaid expenses and other assets	(51,134)	(16,634)
Accounts payable and accrued liabilities	237,914	164,302
Deferred lease abandonment liability	-	(68,726)
Net Cash Used In Operating Activities	<u>(5,298,236)</u>	<u>(3,587,628)</u>
Investing Activities		
Investment in joint venture	(5,217,000)	-
Patent costs	(172,189)	(159,253)
Net Cash Used In Investing Activities	<u>(5,389,189)</u>	<u>(159,253)</u>
Financing Activities		
Net proceeds from the issuance of common stock	27,600,675	4,376,455
Net proceeds from the issuance of preferred stock	3,900,001	-
Restricted cash	-	(65)
Net Cash Provided By Financing Activities	<u>31,500,676</u>	<u>4,376,390</u>
Net Increase In Cash and Cash Equivalents	20,813,251	629,509
Cash and Cash Equivalents, Beginning of Period	<u>4,515,398</u>	<u>3,584,877</u>
Cash and Cash Equivalents, End of Period	<u>\$ 25,328,649</u>	<u>\$ 4,214,386</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 beneficial conversion feature	\$ 2,624,836	\$ -
Accumulated preferred stock dividend	\$ 333,667	\$ 147,000
Conversion of Series A convertible preferred stock to common stock and payment of paid-in-kind dividends to Series A preferred stockholder	\$ 207	\$ -
Decrease in accrued liabilities - stock-based compensation	\$ -	\$ 121,720

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

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

	Series A Preferred Stock		Series B Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Equity
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance - December 31, 2016	1,020,000	\$ 1,020	-	\$ -	7,112,143	\$ 7,112	\$ 86,266,075	\$ (80,716,617)	\$ 5,557,590
Consulting fees paid in stock - non-cash payment of accrued expenses	-	-	-	-	102,975	103	121,617	-	121,720
Shares issued - registered offerings – net of offering costs	-	-	-	-	2,500,886	2,501	2,810,610	-	2,813,111
Stock-based compensation	-	-	-	-	-	-	351,351	-	351,351
Net loss for the three months ended March 31, 2017	-	-	-	-	-	-	-	(1,745,308)	(1,745,308)
Balance – March 31, 2017 (unaudited)	1,020,000	\$ 1,020	-	\$ -	9,716,004	\$ 9,716	\$ 89,549,653	\$ (82,461,925)	\$ 7,098,464
Shares issued - registered offerings – net of offering costs	-	-	-	-	195,860	196	212,241	-	212,437
Stock-based compensation	-	-	-	-	-	-	76,529	-	76,529
Net loss for the three months ended June 30, 2017	-	-	-	-	-	-	-	(1,637,662)	(1,637,662)
Balance June 30, 2017 (unaudited)	1,020,000	\$ 1,020	-	\$ -	9,911,864	\$ 9,912	\$ 89,838,423	\$ (84,099,587)	\$ 5,749,768
Shares issued - registered offerings – net of offering costs	-	-	-	-	1,228,306	1,228	1,349,679	-	1,350,907
Cashless exercise of stock warrants	-	-	-	-	286,584	287	(287)	-	-
Stock-based compensation	-	-	-	-	-	-	170,605	-	170,605
Net loss for the three months ended September 30, 2017	-	-	-	-	-	-	-	(1,733,549)	(1,733,549)
Balance – September 30, 2017 (unaudited)	1,020,000	\$ 1,020	-	\$ -	11,426,754	\$ 11,427	\$ 91,358,420	\$ (85,833,136)	\$ 5,537,731
Shares issued - registered offerings – net of offering costs	-	-	-	-	1,310,949	1,311	1,649,298	-	1,650,609
Stock-based compensation	-	-	-	-	-	-	594,821	-	594,821
Net loss for the three months ended December 31, 2017	-	-	-	-	-	-	-	(1,988,378)	(1,988,378)
Balance – December 31, 2017	1,020,000	\$ 1,020	-	\$ -	12,737,703	\$ 12,738	\$ 93,602,539	\$ (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	-	-	-	-	10,693,535	10,694	20,711,521	-	20,722,215
Cashless exercise of stock warrants	-	-	-	-	496,644	496	(496)	-	-
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 (unaudited)	1,020,000	\$ 1,020	2,666,667	\$ 2,667	23,927,882	\$ 23,928	\$ 119,483,933	\$ (92,543,001)	\$ 26,968,547
Shares issued - registered offerings – net of offering costs	-	-	-	-	4,568,993	4,569	5,141,932	-	5,146,501
Stock-based compensation	-	-	-	-	-	-	148,710	-	148,710
Conversion for payment of dividends, 111,260 preferred stock converted to 124,882 Common	(111,260)	(111)	-	-	-	-	111	-	-
Shares issued in payment of dividend	-	-	-	-	124,883	125	(125)	-	-
Net loss for the three months ended June 30, 2018	-	-	-	-	-	-	-	(3,517,013)	(3,517,013)
Balance – June 30, 2018 (unaudited)	908,740	\$ 909	2,666,667	\$ 2,667	28,621,758	\$ 28,622	\$ 124,774,561	\$ (96,060,014)	\$ 28,746,745
Shares issued - registered offerings – net of offering costs	-	-	-	-	1,767,918	1,767	1,730,192	-	1,731,959
Stock-based compensation	-	-	-	-	-	-	529,649	-	529,649
Conversion 95,116 preferred Shares converted to 110,530 shares of Common Shares	(95,116)	(95)	-	-	110,530	111	(16)	-	-
Shares issued in payment of dividend	-	(1)	-	-	729	1	-	-	-

Net loss for the three months ended September 30, 2018	-	-	-	-	-	-	-	(4,214,586)	(4,214,586)
Balance – September 30, 2018 (unaudited)	813,624	\$ 813	2,666,667	\$ 2,667	30,500,935	\$ 30,501	\$ 127,034,386	\$(100,274,600)	\$26,793,767

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

[Table of Contents](#)

LIGHTBRIDGE CORPORATION
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

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, 2017, included in our Annual Report on Form 10-K for the year ended December 31, 2017.

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 had been formed in the State of Nevada on February 2, 1999, merged with Thorium Power, Inc. ("TPI"), which had been formed 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. The Company is engaged in two operating business segments: (1) technology business segment and (2) consulting business segment (see Note 8. Business Segment Results).

Liquidity

As of September 30, 2018, the Company has an accumulated deficit of approximately \$100.3 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 because of the costs and expenses related to the Company's research and development expenses and corporate general and administrative expenses.

At September 30, 2018, the Company had \$25.3 million in cash and cash equivalents and had a working capital surplus of approximately \$24.6 million. The Company had expended substantial funds on its research and development activities and expects to increase this spending through its equity contributions to Enfission, LLC. The Company's net cash used in operating activities during the nine months ended September 30, 2018 was approximately \$5.3 million, and current projections indicate that the Company will have continued negative cash flows for the foreseeable future. Net losses incurred for the nine months ended September 30, 2018 and 2017 amounted to approximately \$12.5 million and \$5.1 million, respectively.

[Table of Contents](#)

The amount of cash and cash equivalents on the balance sheet as of the date of the filing is approximately \$25 million. The Company also may consider other plans to fund operations including: (1) raising additional capital through debt financings or from other sources; (2) additional funding through new relationships to help fund future research and development costs (e.g., Department of Energy funding); and (3) additional 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 and key nuclear development and regulatory events and its business decisions in the future.

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.

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

In January 2018, Lightbridge and Framatome Inc., a subsidiary of Framatome SAS (formerly 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.

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" line item in the condensed consolidated balance sheets.

The Company allocates income (loss) utilizing the hypothetical liquidation book value ("HLBV") method, in which the Company allocates income or loss

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. Additionally, if the Company's carrying value in an equity method investment is zero and the Company has not guaranteed any obligations of the investee, nor is it required to provide additional funding to the investee, the Company will not recognize its share of any reported losses by the investee until future equity contributions or earnings are generated to offset previously unrecognized losses.

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. All significant intercompany transactions and balances have been eliminated in consolidation. Translation gains and losses for the three and nine months ended September 30, 2018 and 2017 were not significant.

[Table of Contents](#)

As of January 24, 2018, the Company owns a 50% interest in Enfission – accounted for using the equity method of accounting (see Note 3. Investment in Joint Venture). 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 professional judgment.

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. 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, 2018 and \$0 at December 31, 2017, respectively. The remaining \$15.3 million at September 30, 2018 are on deposit with three financial institutions. Total cash and cash equivalents held, as reported on the accompanying condensed consolidated balance sheets, totalled approximately \$25.3 million and \$4.5 million at September 30, 2018 and December 31, 2017, respectively.

Technology Business Segment

The Company's primary business segment, based on future revenue potential, is to develop and commercialize innovative, proprietary nuclear fuel designs, which it expects will significantly enhance the nuclear power industry's economics due to higher power output and improved safety margins.

The Company is focusing its 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.

Lightbridge has 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.

Consulting Business Segment

The Company's business model expanded with consulting revenue in 2008. The Company has provided consulting and strategic advisory services to companies and governments planning to create or expand electricity generation capabilities using nuclear power plants. The Company had no consulting income for the three months and nine months ended September 30, 2018 as the Company has focussed its efforts on its technology business segment and commercialization of its metallic nuclear fuel.

[Table of Contents](#)

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.

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.

Compensation – Stock Compensation — In May 2017, the FASB issued ASU 2017-09, *Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting*. ASU 2017-09 provides clarity and reduces both (1) diversity in practice and (2) cost and complexity when applying the guidance in Topic 718, to a change to the terms or conditions of a share-based payment award. The amendments in ASU 2017-09 should be applied prospectively to an award modified on or after the adoption date. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. This new pronouncement has been adopted on January 1, 2018 and did not have a material effect on the Company's financial position, results of operations or cash flows.

[Table of Contents](#)

Financial Instruments — In January 2016, the FASB issued ASU 2016-01, *Financial Instruments (Subtopic 825-10) - Overall: Recognition and Measurement of Financial Assets and Financial Liabilities*. ASU 2016-01 provides guidance on how entities measure certain equity investments and present changes in the fair value. This standard requires that entities measure certain equity investments that do not result in consolidation and are not accounted for under the equity method at fair value and recognize any changes in fair value in net income. ASU 2016-01 is effective for fiscal years beginning after December 31, 2017. This new pronouncement has been adopted on January 1, 2018 and did not have a material effect on the Company's financial position, results of operations or cash flows.

Statement of Cash Flows — In 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash*

Payments and ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*. ASU 2016-15 addresses the presentation and classification of certain cash receipts and payments in the statement of cash flows. ASU 2016-18 is intended to reduce diversity in the presentation of restricted cash and restricted cash equivalents in the cash flows statement. The statement requires that restricted cash and restricted cash equivalents be included as components of total cash and cash equivalents as presented on the statement of cash flows. These pronouncements go into effect for periods beginning after December 15, 2017. This new pronouncement has been adopted on January 1, 2018 and did not have a material effect on the Company's financial position, results of operations or cash flows.

Revenue Recognition — In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes most current revenue recognition guidance, including industry-specific guidance. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. The guidance provides a five-step analysis of transactions to determine when and how revenue is recognized. Other major provisions include capitalization of certain contract costs, consideration of time value of money in the transaction price and allowing estimates of variable consideration to be recognized before contingencies are resolved in certain circumstances. The guidance also requires enhanced disclosures regarding the nature, amount, timing, and uncertainty of revenue and cash flows arising from an entity's contracts with customers. In March 2016, the FASB issued ASU 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations*. ASU 2016-08 clarifies implementation guidance on principal versus agent considerations in ASU 2014-09. ASU 2016-10 was issued to clarify ASC Topic 606 related to (i) identifying performance obligations; and (ii) the licensing implementation guidance. In May 2016, the FASB issued ASU 2016-12, *Revenue from Contracts with Customers - Narrow-Scope Improvements and Practical Expedients*, to clarify certain narrow aspects of Topic 606 such as assessing the collectability criterion, presentation of sales taxes and other similar taxes collected from customers, noncash consideration, contract modifications at transition, completed contracts at transition, and technical correction. The guidance is effective for the interim and annual periods beginning on or after December 15, 2017, and this new pronouncement was adopted on January 1, 2018. The guidance permits the use of either a retrospective or cumulative effect transition method. The Company has evaluated its prior various contracts subject to these updates and completed its assessment. The Company has concluded that the adoption of this pronouncement did not have a material effect on its condensed consolidated financial statements and related disclosures since it did not enter into any consulting revenue contracts with third parties in 2018.

[Table of Contents](#)

Recent Accounting Pronouncements

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 consolidated financial statements or the related footnote disclosures.

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 will 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 will be effective for fiscal years beginning after December 15, 2018, with early adoption permitted. The Company is currently evaluating the potential impact of the adoption of this accounting pronouncement to its consolidated financial statements. This new pronouncement is not expected to have a material effect on the Company's consolidated financial position, results of operations or cash flows.

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 the Company incurred net losses for the three and nine months ended September 30, 2018 and 2017, 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.

Note 3. Investment in Joint Venture

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.

[Table of Contents](#)

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 investment accounted for under the equity method consisted of the following as of September 30, 2018 (carrying amount rounded in millions):

Investment Name	Ownership Interest	Carrying Amount
Enfission, LLC	50%	\$ 0.7
Total - Equity Method Investment		\$ 0.7

The Company invested approximately \$5.2 million in Enfission as of September 30, 2018. The cash balance in Enfission at September 30, 2018 was approximately \$3.2 million. During the nine months ended September 30, 2018, Enfission incurred a loss of approximately \$4.5 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 \$4.5 million in the accompanying condensed consolidated statement of operations. The Company's cash position exceeds the approximate budget for 2018 of \$10 million to \$12 million that it is presently contractually bound to provide to Enfission. The Company expects to continue providing additional equity contributions in 2018 and for the foreseeable future.

Summarized balance sheet information for the Company's equity method investee Enfission as of September 30, 2018 is presented in the following table

(rounded in millions):

Current assets	
Cash	\$ 3.2
Other current assets	0.3
Total assets	<u>\$ 3.5</u>
Current liabilities	<u>\$ 2.1</u>
Total liabilities	<u>\$ 2.1</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, 2018 (rounded in millions):

Net sales and revenue	\$ 0.0
Research and development costs	3.7
Administrative expenses	<u>0.8</u>
Total operating loss	<u>\$ 4.5</u>
Loss from operations	<u>\$ 4.5</u>
Net loss	<u>\$ 4.5</u>

As of September 30, 2018, the total receivable due from Enfission was approximately \$0.5 million, which represents consulting fees charged to Enfission and reimbursable expenses paid by Lightbridge on Enfission's behalf.

Note 4. Accounts Payable and Accrued Liabilities

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

	September 30, 2018	December 31, 2017
Trade payables	\$ 0.2	\$ 0.3
Accrued expenses and other	0.3	0.6
Accrued bonuses	<u>0.9</u>	<u>0.3</u>
Total	<u>\$ 1.4</u>	<u>\$ 1.2</u>

[Table of Contents](#)

Note 5. Commitments and Contingencies

Commitments

Operating Leases

On December 22, 2015, we entered into a lease for new office space for a 12-month term with a monthly rent payment of approximately \$6,500 per month plus additional charges. This lease was renewed for an additional one-year term in December 2017.

The future minimum lease payments required under the non-cancellable operating leases are as follows (rounded in millions):

Year ending December 31,	Amount
2018	\$ 0.1
Total minimum payments required	\$ 0.1

Employment Agreements

On August 8, 2018, the Company entered into employment agreements with the Chief Executive Officer, Executive Vice President of Fuel Operations, and Chief Financial Officer. The employment agreements provide for an initial annual base salary and establish a discretionary target annual bonus of 50% of base salary for each executive with the final amount of any such bonus to be determined by the Compensation Committee of the Board, based on the achievement of performance goals that are established by the Compensation Committee. Each employment agreement provides that if the executive's employment is terminated or not extended by the Company without "cause," or terminated by the executive for "good reason" (each as defined in the employment agreement), then, subject to the terms and conditions of the employment agreement, the executive will be entitled to certain severance payments and benefits.

Contingency

Litigation

A former Chief Financial Officer of the Company filed a complaint against the Company with the U.S. Occupational Safety and Health Administration (the "OSHA Complaint") on March 9, 2015. This complaint was closed and dismissed by OSHA in January 2018 without any findings against the Company. On March 14, 2018 an appeal was filed and the Company will vigorously defend this appeal and believes that this appeal hearing will not result in any findings against the Company. As of September 30, 2018, legal fees of approximately \$4,000 were incurred and are expected to be paid in full by the Company's insurance carriers.

Note 6. Research and Development Costs

Research and development costs included in the accompanying condensed consolidated statement of operations amounted to approximately \$0.9 million and \$0.5 million for the three months ended September 30, 2018 and 2017, respectively, and approximately \$2.3 million and \$1.5 million for the nine months ended September 30, 2018 and 2017, respectively.

Note 7. Stockholders' Equity

At September 30, 2018, there were 30,500,935 common shares outstanding, and there were also outstanding warrants relating to 844,337 shares of common stock, stock options relating to 5,752,494 shares of common stock, 813,624 shares of Series A convertible preferred stock convertible into 813,624 shares of common stock (plus accrued dividends of \$361,962 relating to an additional 131,858 common shares), and 2,666,667 shares of Series B convertible preferred stock convertible into 2,666,667 shares of common stock (plus accrued dividends of \$186,667, relating to an additional 124,445 common shares), all totalling 40,834,360 shares of common stock and all common stock equivalents, including accrued preferred stock dividends, outstanding at September 30, 2018.

[Table of Contents](#)

At December 31, 2017, there were 12,737,703 common shares outstanding, and there were also outstanding warrants relating to 1,210,905 shares of common stock, stock options relating to 3,976,884 shares of common stock, and 1,020,000 shares of Series A convertible preferred stock convertible into 1,020,000 shares of common stock (plus accrued dividends of \$276,578, relating to an additional 100,753 common shares), all totalling 19,046,245 shares of common stock and common stock equivalents outstanding at December 31, 2017.

Filing of New \$75 Million Shelf Registration Statement

On March 15, 2018, the Company filed a new shelf registration statement on Form S-3, registering the sale of up to \$75 million of the Company's securities, which became effective on March 23, 2018.

Common Stock Equity Offerings

ATM Offering - 2018

On March 30, 2018, the Company entered into an at-the-market issuance sales agreement ("New ATM") with B. Riley FBR, Inc. (the "Distribution

Agent”), pursuant to which the Company may issue and sell shares of its common stock from time to time through the Distribution Agent as the Company’s sales agent. Sales of the Company’s common stock through the Distribution 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), the base prospectus filed as part of such registration statement and the prospectus supplement dated March 30, 2018, which registered the offer and sale of up to \$50 million of common stock under the New ATM. Sales under the New ATM that were made during the nine months ended September 30, 2018 were sales of 6.4 million shares that totalled gross proceeds of \$7.2 million and the remaining balance as of September 30, 2018 were \$42.8 million. We have raised an approximate \$1.1 million under this prospectus supplement from October 1, 2018 to the date of this Form 10-Q filing.

On January 24, 2018, January 26, 2018, February 7, 2018 and March 2, 2018, the Company filed prospectus supplements registering an aggregate amount of approximately \$22.6 million under the prior at-the-market (“ATM”) agreement with B. Riley FBR, Inc. The Company sold approximately \$27.6 million during the nine months ended September 30, 2018 under the above-mentioned prospectus supplements.

ATM Offering - 2017

On July 12, 2017, the Company entered into an ATM sales agreement with FBR Capital Markets & Co. and MLV & Co. LLC. The Company registered the sale of approximately \$1.6 million under the ATM sales agreement on July 12, 2017 and sold all of such amount in the year ended December 31, 2017, through the issuance of approximately 1.4 million shares.

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 666,664 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 0.25 of a 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 \$1.50 per share subject to adjustments in the case of stock splits and stock dividends.

[Table of Contents](#)

Holders of the Series B Preferred Stock are also entitled to participating dividends whenever dividends in cash securities (other than shares 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 \$1.875. 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 133,432 common shares in the Company at an exercise price of \$1.50 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 accumulated dividend (unpaid) at September 30, 2018 was approximately \$187,000. The liquidation preference of the Series B Preferred Stock at September 30, 2018 was approximately \$4.2 million.

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 \$5.4902 prior to August 2, 2019 or greater than \$8.2353 at any time. The Company can only exercise this option 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 Series B Preferred Stock was initially convertible into 2,666,667 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 \$2.34 per share. At \$2.34 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 \$1.50 conversion price of the PIK dividends to the \$2.34 commitment date fair value per share 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 cumulative deemed dividend for this PIK dividend for the nine months ended September 30, 2018 was approximately \$105,000. Total deemed dividend for this PIK dividend for the three months ended September 30, 2018 was approximately \$39,000.

[Table of Contents](#)

Pursuant to the Securities Purchase Agreement for the Series B Preferred Stock, the Company terminated our stock purchase agreement with Aspire Capital and this termination resulted in a write-off of our deferred financing costs asset of approximately \$1 million.

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. (“GIH”) 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 \$2.7451 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 accumulated dividend (unpaid) at September 30, 2018 and December 31, 2017 was approximately \$0.4 million and \$0.3 million dollars, respectively. On April 30, 2018, the holders of the Series A Preferred Shares converted 111,260 preferred shares into 124,882 common shares. On September 30, 2018 the holders of the Series A Preferred Shares were issued 729 common shares in payment of the dividend for the month of April 2018.

On September 30, 2018, the holders of the Series A Preferred Shares converted 95,116 preferred shares into 110,530 common shares. The Series A Preferred Shares outstanding at September 30, 2018 was 813,624 shares with a liquidation preference of approximately \$2.6 million.

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 \$2.75 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. 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 \$3.315 per share. At \$3.315 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, which was immediately accreted as a deemed dividend because the conversion rights were immediately effective.

Additionally, comparison of the \$2.7451 conversion price of the PIK dividends 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. The total deemed dividends for this PIK dividend for the three months and nine months ended September 30, 2018 was approximately \$10,000 and \$30,000, respectively.

[Table of Contents](#)

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. The liquidation preference of the Series A Preferred Stock at September 30, 2018 and December 31, 2017 was approximately \$2.6 million and \$3.1 million, respectively.

Warrants

	September 30, 2018	December 31, 2017
<i>Outstanding Warrants</i>		
Issued to Investors on October 25, 2013, entitling the holders to purchase 250,000 common shares in the Company at an exercise price of \$11.50 per common share up to and including April 24, 2021. In 2016, 59,450 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 \$6.25 per share.	163,986	163,986
Issued to Investors on November 17, 2014, entitling the holders to purchase 546,919 common shares in the Company at an exercise price of \$11.55 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 \$6.25 per share.	546,919	546,919
Issued to an investor on August 10, 2016, entitling the holders to purchase 500,000 common shares in the Company at an exercise price of price of \$0.01 per share, up to and including December 31, 2019. These warrants were exercised in January 2018.	-	500,000
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 133,432 common shares in the Company at an exercise price of \$1.50 per share, up to and including January 30, 2021.	133,432	-

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 “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 Plan initially authorized a total of 600,000 shares to be available for grant under the Plan, of which the amount was increased to 1,400,000 shares in May 2016 and 2,900,000 shares in May 2017. The Company held its 2018 Annual Meeting of Stockholders on May 4, 2018. At the Annual Meeting, the Company’s stockholders approved an amendment to the Plan to increase the number of shares authorized for issuance thereunder by 3,400,000 shares, resulting in total shares available under the Plan to 6,300,000 shares.

[Table of Contents](#)

Total stock options outstanding at September 30, 2018 and December 31, 2017, under the 2006 Stock Plan and 2015 Equity Incentive Plan were 5,752,494 and 3,976,884 of which 3,598,133 and 2,434,148 of these options were vested at September 30, 2018 and December 31, 2017, 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, 2018 and 2017 are as follows (rounded in thousands):

	Three months ended September 30		Nine months ended September 30	
	2018	2017	2018	2017
Research and development expenses	\$ 162,000	\$ 94,000	\$ 728,000	\$ 280,000
General and administrative expenses	368,000	77,000	1,223,000	318,000

Total stock-based compensation expense	\$ 530,000	\$ 171,000	\$ 1,951,000	\$ 598,000
--	------------	------------	--------------	------------

Non-Qualified Stock Option Grants and Short-Term Incentive Stock Options

On August 30, 2017, the Compensation Committee of the Board of Directors granted 31,425 non-qualified stock options with a strike price of \$1.08 per share, which was the closing price of the Company's stock on the grant date to a consultant of the Company, under the 2015 Equity Incentive Plan. These options have a 10-year contractual term, with a grant date fair market value of approximately \$0.80 per option. These options vest annually in equal amounts over a three-year period.

On October 26, 2017, the Compensation Committee of the Board of Directors granted 523,319 short-term incentive stock options and non-qualified stock options under the 2015 Equity Incentive Plan to employees and consultants of the Company. All of these stock options vested immediately, with a strike price of \$1.05 per share, which was the closing price of the Company's stock on October 26, 2017. These options have a 10-year contractual term, with a fair market value of approximately \$0.73 per option with an expected term of 5 years.

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 1,752,791 shares to employees, consultants, and directors of the Company. These stock options have a strike price of \$0.90. Out of this total, approximately 1,540,263 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 \$3 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.

[Table of Contents](#)

The remaining approximately 212,528 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 \$0.69 per share and the awards with service conditions for the directors of the Company were assigned a fair value of \$0.70 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	9.8 months
Closing price per share – common stock	\$ 0.88

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 \$4.50, otherwise they would be exercised at expiration, if in the money.

As of September 30, 2018, it was 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.

On October 26, 2017 the Compensation Committee of the Board of Directors granted 1,299,533 long-term non-qualified stock options to employees, consultants and directors of the Company. Out of this total, approximately 1,120,322 stock options were issued to employees and consultants containing both performance-based and market-based vesting provisions. These performance-based and market-based stock options vest only upon the applicable performance conditions or market conditions being satisfied by certain milestone dates, based on either a graded vesting schedule for each performance-based milestone or an accelerated 100% vesting for one performance-based milestone and one market-based milestone, as discussed below. The graded vesting schedule is based on the achievement of performance-based milestones related to the formation of the joint venture with Framatome and the development milestones for the fuel. Accelerated vesting of all these option grants would occur upon achievement of one or both of the following

performance-based and market-based milestones:

1. The Company's closing stock price is above \$3 per share by December 31, 2018; or
2. The Company secures at least a \$2 million investment from a commercial nuclear industry entity other than Framatome by December 31, 2019.

Accelerated vesting occurred on January 25, 2018 when the Company's stock price closed above \$3 per share and therefore met the market-based milestone for 100% vesting of these option grants, as set forth in these stock option agreements.

The remaining 179,211 stock options were issued to the directors of the Company and vest over a one-year period on the anniversary date of the grant. These stock options have a strike price of \$1.05 per share, which was the closing price of the Company's stock on October 26, 2017. All options granted have a 10-year contractual term.

In May 2018, shareholder approval was received on contingent grants and approximately 0.7 million of such long-term non-qualified stock options were issued under the 2015 Equity Stock Plan.

[Table of Contents](#)

Modification of Option Grants to the Company's Prior Chief Financial Officer

The Company approved the modification of the terms of options held by Linda Zwobota, our prior CFO, by extending the exercise period of vested options from 90 days to 5 years after her retirement on August 31, 2018. Furthermore, for any options not vested at August 31, 2018, the vesting period was changed so that they would continue to vest during a consulting period ending on December 31, 2018.

For the vested options outstanding, the modification date for the valuation of the options was August 31, 2018, and therefore the Company calculated the August 31, 2018 value of all of Ms. Zwobota's vested options as of that date. The Company used the term of the lesser of 1) the remaining contractual term, or 2) five years (the revised exercise period after her leaving employee status) and the value was \$216,860 by using Black Scholes valuation model calculation. Secondly, the Company calculated the August 31, 2018 value of the above using a 90 day term, the period during which she would have retained the right to exercise upon ceasing to be an employee under the previous structure. The value was \$16,128 for all of Ms. Zwobota's vested options with 90 days. The Company expensed the difference between these values of \$200,732 immediately to stock-based compensation expense, during the quarter ended September 30, 2018.

Stock option transactions of the employees, directors, and consultants are summarized as follows for the nine months ended September 30, 2018:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value
Beginning of the period	3,976,884	\$ 3.58	\$ 2.49
Granted	1,784,455	0.90	0.70
Exercised	-	-	-
Forfeited	-	-	-
Expired	(8,845)	42.60	30.86
End of the period	5,752,494	\$ 2.69	\$ 1.93
Options exercisable	3,598,133	\$ 3.57	\$ 2.57

Stock option transactions of the employees, directors, and consultants are summarized as follows for the year ended December 31, 2017:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value
Beginning of the year	2,172,581	\$ 6.70	\$ 4.83
Granted	1,854,277	1.05	0.77
Exercised	-	-	-
Forfeited	-	-	-
Expired	(49,974)	45.53	38.70
End of the year	3,976,884	\$ 3.58	\$ 2.49
Options exercisable	2,434,148	\$ 4.84	\$ 3.36

[Table of Contents](#)

A summary of the status of the Company's non-vested options as of September 30, 2018 and December 31, 2017, and changes during the year ended December 31, 2017 and the nine months ended September 30, 2018, is presented below:

	Shares	Weighted-Average Fair Value Grant Date	Weighted Average Exercise Price
Non-vested – December 31, 2016	450,476	\$ 3.60	\$ 5.40
Granted	1,854,277	0.77	1.05
Vested	(762,017)	1.67	2.54
Forfeited	-	-	-
Non-vested – December 31, 2017	1,542,736	\$ 1.10	\$ 1.58
Granted	1,784,455	0.70	0.90
Vested	(1,172,830)	\$ 1.14	\$ 1.24
Forfeited	-	-	-
Non-vested – September 30, 2018	2,154,361	\$ 0.87	\$ 1.21

- i) A total of 101,351 non-qualified 10-year options have been issued, and are outstanding, to advisory board members at exercise prices of \$1.05 to \$28.05 per share.
- ii) A total of 5,160,826 incentive stock options and non-qualified 5-10-year options have been issued, and are outstanding, to the directors, officers, and employees at exercise prices of \$0.09 to \$43.25 per share. From this total, 1,409,248 options are outstanding to the Chief Executive Officer, who is also a director, with remaining contractual lives of 0.6 years to 9.9 years. All other options issued to directors, officers, and employees have a remaining contractual life ranging from 0.5 years to 9.9 years.

iii) A total of 490,317 non-qualified 3-10-year options have been issued, and are outstanding, to consultants at exercise prices of \$0.09 to \$43.25 per share.

As of September 30, 2018, there was approximately \$1.1 million 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 0.7 years. For stock options outstanding at September 30, 2018, the intrinsic value was approximately \$35,000. For stock options outstanding at December 31, 2017, the intrinsic value was approximately \$0.3 million.

The following table provides certain information with respect to the above-referenced stock options that were outstanding and exercisable at September 30, 2018:

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
\$ 0.90-\$1.05	9.46	3,607,307	\$ 0.98	9.07	1,643,641	\$ 1.05
\$ 1.06-\$2.00	8.15	705,814	\$ 1.52	8.12	684,864	\$ 1.53
\$ 2.01-\$6.00	7.11	821,174	\$ 4.59	7.10	651,429	\$ 4.58
\$ 6.01-\$20.00	4.38	505,694	\$ 7.47	4.38	505,694	\$ 7.47
\$ 20.01-\$43.25	0.97	112,505	\$ 29.46	0.97	112,505	\$ 29.46
Total	8.35	5,752,494	\$ 2.69	7.62	3,598,133	\$ 3.57

[Table of Contents](#)

The following table provides certain information with respect to the above-referenced stock options that were outstanding and exercisable at December 31, 2017:

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
\$ 1.05-\$2.00	9.56	2,528,666	\$ 1.18	9.28	1,197,708	\$ 1.33
\$ 2.01-\$6.00	7.86	821,174	\$ 4.59	7.86	651,429	\$ 4.58
\$ 6.01-\$20.00	5.12	505,694	\$ 7.47	4.93	463,661	\$ 7.58
\$ 20.01-\$45.00	1.66	118,016	\$ 29.85	1.66	118,016	\$ 29.85
\$ 45.01-\$72.00	0.18	3,334	\$ 50.25	0.18	3,334	\$ 50.25
Total	8.40	3,976,884	\$ 3.58	7.70	2,434,148	\$ 4.84

Weighted average assumptions used in the Black Scholes option-pricing model for the nine months ended September 30, 2017, were as follows:

**Nine Months
ended
September 30,
2017**

Average risk-free interest rate	1.85%
Average expected life- years	6.0
Expected volatility	88.5%
Expected dividends	0.0

In accordance with ASC 718, the market-based and performance-based long-term non-qualified option grants awards issued in 2017 were assigned a fair value of \$0.80 per option share (total value of \$0.9 million) on the date of grant using a Monte Carlo simulation. The following assumptions were used in the Monte Carlo simulation model:

Expected volatility	87.5% to 91.24%
Risk free interest rate	2.42%
Dividend yield rate	0
Weighted average remaining expected life	4.2 years
Closing price per share – common stock	\$ 1.05

Note 8. Business Segment Results

The Company has two principal business segments, (1) the technology business and (2) the consulting services business. These business segments were determined based on the nature of the operations and the services offered. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief decision-makers of the Company, in deciding how to allocate resources and in assessing performance. The Chief Executive Officer and Chief Financial Officer have been identified as the chief operating decision makers. The chief operating decision makers direct the allocation of resources to operating segments based on the profitability, the cash flows, and the business plans of each respective segment. Corporate expenses pertain to certain costs that are not allocated to the reportable segments, primarily consisting of unallocated corporate overhead costs, including administrative functions.

The business segment results for the three months ended September 30, 2018 and 2017 was as follows:

	Consulting		Technology		Corporate and Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Revenue	\$ -	\$ 15,136	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,136
Other income – joint venture	\$ -	\$ -	\$ 203,180	\$ -	\$ -	\$ -	\$ 203,180	\$ -
Equity in loss from joint venture	\$ -	\$ -	\$ (1,743,340)	\$ -	\$ -	\$ -	\$ (1,743,340)	\$ -
Segment profit (loss) - pre-tax	\$ -	\$ 15,744	\$ (2,404,220)	\$ (458,663)	\$ (1,810,366)	\$ (1,290,630)	\$ (4,214,586)	\$ (1,733,549)
Total assets	\$ -	\$ 15,136	\$ 1,539,881	\$ 1,319,718	\$ 26,643,010	\$ 5,531,270	\$ 28,182,891	\$ 6,866,124
Interest expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,023	\$ -	\$ 8,023
Investment in joint venture	\$ -	\$ -	\$ 671,888	\$ -	\$ -	\$ -	\$ 671,888	\$ -

[Table of Contents](#)

The business segment results for the nine months ended September 30, 2018 and 2017 was as follows:

	Consulting		Technology		Corporate and Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Revenue	\$ -	\$ 165,046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 165,046
Other income – joint venture	\$ -	\$ -	\$ 790,554	\$ -	\$ -	\$ -	\$ 790,554	\$ -
Equity in loss from joint venture	\$ -	\$ -	\$ (4,545,112)	\$ -	\$ -	\$ -	\$ (4,545,112)	\$ -
Segment (loss) profit- pre-tax	\$ -	\$ (45,051)	\$ (6,067,682)	\$ (1,468,650)	\$ (6,385,404)	\$ (3,602,818)	\$ (12,453,086)	\$ (5,116,519)
Total assets	\$ -	\$ 15,136	\$ 1,539,881	\$ 1,319,718	\$ 26,643,010	\$ 5,531,270	\$ 28,182,891	\$ 6,866,124
Interest expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,095	\$ -	\$ 16,095
Investment in joint venture	\$ -	\$ -	\$ 671,888	\$ -	\$ -	\$ -	\$ 671,888	\$ -

Note 9. Related Party Transaction

The Company provided research and development consulting services to Enfission. The total consulting services was \$0.2 million and \$0.8 million for the three and nine months ended September 30, 2018 from Enfission’s date of inception on January 25, 2018 to September 30, 2018, recorded under the caption “Other income from joint venture” in the accompanying condensed consolidated statement of operations.

[Table of Contents](#)

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, (1) those concerning market and business segment growth, demand and acceptance of our nuclear energy consulting services, and nuclear fuel technology business, (2) any projections of sales, earnings, revenue, margins, or other financial items, (3) any statements of the plans, strategies, and objectives of management for future operations and the timing of the development of our nuclear fuel technology, (4) any statements regarding future economic conditions or performance, (5) uncertainties related to conducting business in foreign countries, (6) any statements about future financings and liquidity, as well as (7) 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 Enfission, our joint venture with Framatome, 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,
- general economic and business conditions in the local economies in which we regularly conduct business, which can affect demand for the Company’s services,
- 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 risks identified in 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.

[Table of Contents](#)

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. Financial Statements" of this report. This overview summarizes the MD&A, which includes the following sections:

- *Overview of Our Business* — a general overview of our two business segments, the material opportunities and challenges of our business;
- *Critical Accounting Policies and Estimates* — a discussion of accounting policies that require critical judgments and estimates;
- *Operations Review* — an analysis of our consolidated results of operations for the periods presented in our consolidated condensed financial statements. Except to the extent that differences among our operating segments are material to an understanding of our business as a whole, we present the discussion in the MD&A on a consolidated basis; 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 TWO BUSINESS SEGMENTS

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 primary focus is the development and commercialization of next generation nuclear fuel that will significantly improve the economics and safety of existing and new reactors, with a meaningful impact on addressing climate change and air pollution challenges.

We believe our nuclear fuel technology has the potential to enhance reactor safety and the proliferation resistance of spent fuel and increase the power output of commercial reactors, reducing the cost of generating electricity and the amount of nuclear waste per unit of electricity generated. We also believe our fuel will facilitate the ability of reactors to load-follow, pairing nuclear power with renewables in providing baseload electricity.

We now conduct our business principally through Enfission, our 50/50 joint venture with Framatome, which was formed on January 24, 2018, for the development, regulatory licensing, fabrication, and sale of nuclear fuel assemblies based on Lightbridge-designed metallic fuel technology and other advanced nuclear fuel intellectual property. Enfission serves as our exclusive vehicle for the development of manufacturing processes and fuel assembly designs for pressurized water reactors 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. 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. We also opportunistically provide nuclear power consulting and strategic advisory services to commercial and governmental entities worldwide.

Our principal executive offices are located at 11710 Plaza America Drive, Suite 2000, Reston, Virginia 20190 USA.

[Table of Contents](#)

Recent Developments

ENFISSION R&D ADVANCEMENTS IN Q-3 2018

1. Fabrication:

- Completed several studies on key fabrication steps, particularly relating to the co-extrusion process modeling, billet preparation conditions, and material flows
- Established purchasing process for equipment
- Continued further refinement of fabrication process steps, material flows, and equipment needs and specifications
- Researched material properties and prepared material data manual

2. Fuel Design:

- Prepared product requirements document and data sheet
- Initiated next phase of neutronics code modifications to model Lightbridge Fuel™ geometry
- Developed 3D model for Computational Fluid Dynamics (CFD) analysis
- Developed fuel assembly CFD model to investigate Critical Heat Flux (CHF) performance

3. Regulatory Licensing:

- Established regular interaction with the NRC, with the first Enfission project kick-off meeting held in August 2018
- Continued development of fuel design limits in support of licensing activities

Intergovernmental Panel on Climate Change

In October 2018 the Intergovernmental Panel on Climate Change (IPCC) issued its Sixth Assessment Report (AR6) – Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. This report concludes that there is a limit of 12 years before global warming will reach 1.5°C or higher above pre-industrial average global temperature, resulting in significant weather changes and climate effects that would have long-lasting or irreversible changes to the planet. The report determined that to minimize this effect nations would need to adopt “rapid and far-reaching transitions in land, energy, industry, buildings, transport, and cities.” We believe that achieving this goal is 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 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 can be an essential element of reaching this goal.

[Table of Contents](#)

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 licensed 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 service 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 chairperson of Enfission's board of directors alternates every year between directors appointed by Lightbridge and directors 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.

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 and forming a steering committee for the project; (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.

We currently anticipate a minimum amount of cash outlays to third parties for research and development expenditures and equipment purchases of approximately \$15 million to \$20 million, for the next 12 to 15 months.

[Table of Contents](#)

Overview of Our Next Generation Nuclear Fuel

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 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 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 approaching the limits 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.

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 significantly enhance 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 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 kilowatt-hour as well as enhancing proliferation resistance of spent fuel.

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. Further, we believe that the fuel fabrication or manufacturing process for this new fuel design is simpler, which we expect could lower fuel fabrication costs.

[Table of Contents](#)

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. Lightbridge fuel is designed to prevent hydrogen gas generation in design-basis LOCA situations, which is a major safety benefit.

Anticipated Schedule for Development and Sale of Nuclear Fuel Assemblies

Set forth below is our anticipated schedule for Enfission's development and sale of nuclear fuel assemblies. Please see Item 1A, *Risk Factors* in our Annual Report on Form 10-K filed on March 14, 2018, for a discussion of certain risks that may delay or impair the commercialization of nuclear fuel assemblies incorporating our nuclear fuel technology. Based on our current expectations, we anticipate that, either directly or through Enfission, we will:

- develop a regulatory licensing plan for lead test assemblies and present it to the US Nuclear Regulatory Commission (NRC) in 2018 following our kick-off meeting with the NRC ;
- enter into a lead test assembly agreement with a host reactor in 2019-2020;
- develop analytical models in 2018-2023 for our metallic fuel technology that can be used for reactor analysis and regulatory licensing;
- perform in-reactor and out-of-reactor experiments in 2020-2025;
- have semi-scale metallic fuel samples fabricated in 2019-2020 for irradiation testing in a test reactor environment under prototypic commercial reactor conditions;
- establish a pilot-scale fuel fabrication facility and demonstrate full-length fabrication of our metallic fuel rods in 2020-2023; and
- begin lead test assembly (LTA) operation in a full-size commercial light water reactor as soon as 2023-2024, which involves testing a limited number of full-scale fuel assemblies in the core of a commercial nuclear power plant over three 18-month cycles.

Accordingly, based on our current expected schedule, a purchase order for an initial reload batch placed by a utility is expected as soon as 2026-2027 (after two 18-month cycles of LTA operation), with final qualification (i.e., deployment of fuel in the first reload batch) in a commercial reactor expected as soon as 2028-2029. We intend to seek development funding contributions or other financing arrangements with utilities several years in advance of LTA demonstration.

Our earlier plan was to begin irradiation of metallic fuel samples in the Halden research reactor in 2020-2021. The Halden research reactor is operated by the Institute for Energy Technology (IFE) in Norway. In June 2018, IFE's board of directors announced its decision not to seek renewal of the Halden reactor operating license beyond 2020.

[Table of Contents](#)

The Company now plans to conduct the initial testing and demonstration of its advanced metallic nuclear fuel in the United States, in lieu of the Halden Reactor, at sites the Company plans to announce later this year or in early 2019. The Company has begun evaluating alternatives for a back-up reactor facility, including the Advanced Test Reactor at Idaho National Laboratory and/or designing a segmented lead test rod for irradiation in an operating U.S. commercial reactor to allow generation of the irradiation data at the required burn-up level to support a subsequent lead test assembly operation in a commercial U.S. reactor. The Company also reaffirmed plans to commence testing of its fuel in a U.S. research reactor by 2020, as well as deploy a lead test rod in a U.S. commercial reactor by 2021.

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 14, 2018, incorporated herein by reference. There have been no significant changes in our critical accounting policies and estimates during the nine months ended September 30, 2018.

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 condensed consolidated financial statements for a discussion of recent accounting standards and pronouncements.

OPERATIONS REVIEW

Business Segments and Periods Presented

Our business operations can be categorized in two segments:

- (1) Our nuclear fuel technology business segment - we develop next generation nuclear fuel technology through Enfission that has the potential to significantly increase the power output of commercial reactors, reducing the cost of generating electricity and the amount of nuclear waste on a per-megawatt-hour basis and enhancing reactor safety and the proliferation resistance of spent fuel. Our main focus is on our nuclear fuel technology business segment.
- (2) Our nuclear energy consulting business segment - we provide nuclear power consulting and strategic advisory services to commercial and governmental entities worldwide. Our nuclear consulting business operations are intended to help defray a portion of the costs relating to the development of our nuclear fuel technology.

Financial information about our business segments is included in Note 8. Business Segment Results of the notes to the condensed consolidated financial statements, included in Part, I Item 1, Financial Statements of this Quarterly Report on Form 10-Q.

[Table of Contents](#)

We have provided a discussion of our results of operations on a condensed consolidated basis and have also provided certain detailed segment information for each of our business segments below for the three and nine months ended September 30, 2018 and 2017. We have organized our operations into two principal segments (1) the technology business segment and (2) the consulting business segment. We present our segment information along the same lines that our chief executives review our operating results in assessing performance and allocating resources.

The business segment results for the three months ended September 30, 2018 and 2017 was as follows:

	Consulting		Technology		Corporate and Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Revenue	\$ -	\$ 15,136	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,136
Other income – joint venture	\$ -	\$ -	\$ 203,180	\$ -	\$ -	\$ -	\$ 203,180	\$ -
Equity in loss from joint venture	\$ -	\$ -	\$ (1,743,340)	\$ -	\$ -	\$ -	\$ (1,743,340)	\$ -
Segment profit (loss) - pre-tax	\$ -	\$ 15,744	\$ (2,404,220)	\$ (458,663)	\$ (1,810,366)	\$ (1,290,630)	\$ (4,214,586)	\$ (1,733,549)
Total assets	\$ -	\$ 15,136	\$ 1,539,881	\$ 1,319,718	\$ 26,643,010	\$ 5,531,270	\$ 28,182,891	\$ 6,866,124
Interest expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,023	\$ -	\$ 8,023
Investment in joint venture	\$ -	\$ -	\$ 671,888	\$ -	\$ -	\$ -	\$ 671,888	\$ -

The business segment results for the nine months ended September 30, 2018 and 2017 was as follows:

	Consulting		Technology		Corporate and Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Revenue	\$ -	\$ 165,046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 165,046
Other income – joint venture	\$ -	\$ -	\$ 790,554	\$ -	\$ -	\$ -	\$ 790,554	\$ -
Equity in loss from joint venture	\$ -	\$ -	\$ (4,545,112)	\$ -	\$ -	\$ -	\$ (4,545,112)	\$ -
Segment (loss) profit- pre-tax	\$ -	\$ (45,051)	\$ (6,067,682)	\$ (1,468,650)	\$ (6,385,404)	\$ (3,602,818)	\$ (12,453,086)	\$ (5,116,519)
Total assets	\$ -	\$ 15,136	\$ 1,539,881	\$ 1,319,718	\$ 26,643,010	\$ 5,531,270	\$ 28,182,891	\$ 6,866,124
Interest expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,095	\$ -	\$ 16,095
Investment in joint venture	\$ -	\$ -	\$ 671,888	\$ -	\$ -	\$ -	\$ 671,888	\$ -

Technology Business

We currently anticipate a minimum amount of cash outlays to third parties for research and development expenditures and equipment purchases of approximately \$15 million to \$20 million, for the next 12 to 15 months. We spent approximately \$0.9 million and \$0.5 million for research and development for the three months ended September 30, 2018 and 2017, respectively, and approximately \$2.3 million and \$1.5 million for the nine months ended September 30, 2018 and 2017, respectively.

Over the next 2 to 3 years, we expect that our research and development activities will increase and will be primarily focused on testing and demonstration of our metallic fuel technology for Western-type water-cooled reactors. The main objective of this research and development phase is to prepare for full-scale demonstration of our fuel technology in an operating commercial power reactor.

Financial information about our joint venture is included in Note 3. Investment in Joint Venture of the notes to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for information regarding our equity method investment in Enffission.

[Table of Contents](#)

Consulting Services Business

All of our revenue from third parties had been from our consulting services business segment. The fee type and structure that we offer for each client engagement is dependent on a number of variables, including the complexity of the services, the level of the opportunity for us to improve the client's electricity generation capabilities using nuclear power plants, and other factors. We did not have any revenue from our consulting services business segment during the three and nine months ended September 30, 2018, and we currently do not expect to have significant revenue in the future.

Condensed Consolidated Results of Operations – Three Months Ended September 30, 2018 and 2017

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) Change \$	Increase (Decrease) Change %
	2018	2017		
Consulting Revenues	\$ -	\$ 15,136	\$ (15,136)	(100)%
Cost of Services Provided				
Consulting expenses	\$ -	\$ 9,364	\$ (9,364)	(100)%
Gross Profit	\$ -	\$ 5,772	\$ (5,772)	(100)%
Operating Expenses				
General and administrative	\$ 1,889,401	\$ 1,149,847	\$ 739,554	64%
Research and development expenses	864,060	458,663	405,397	88%
Total Costs and Expenses	\$ 2,753,461	\$ 1,608,510	\$ 1,144,951	71%
Other Operating Income and (Loss)				
Other income from joint venture	\$ 203,180	\$ -	\$ (203,180)	(100)%
Equity in loss from joint venture	(1,743,340)	-	1,743,340	100%
Total Other Operating Income and (Loss)	\$ (1,540,160)	\$ -	\$ 1,540,160	100%
Total Operating Loss	\$ (4,293,621)	\$ (1,602,738)	\$ 2,690,883	168%
Total Other Income and (Expenses)	\$ 79,035	\$ (130,811)	\$ (209,846)	(160)%
Net Loss - Before Income Taxes	\$ (4,214,586)	\$ (1,733,549)	\$ 2,481,037	143%
Net Loss	\$ (4,214,586)	\$ (1,733,549)	\$ 2,481,037	143%

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 continue to provide some consulting services 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, 2018 and currently, we do not expect to have significant revenue in our consulting business segment in the future.

Cost of Services Provided

Because we have shifted the focus and resources of the Company to the fuel division and away from consulting, we have not incurred costs related to consulting in 2018. Cost of services provided in 2017 was comprised of expenses related to the consulting, professional, administrative and other support costs, and stock-based compensation allocated to our consulting projects labor, which were incurred to perform and support the work done for our consulting projects.

[Table of Contents](#)

General and Administrative Expenses

The following table presents our general and administrative expenses (rounded in millions):

	Three Months Ended September 30,	
	2018	2017
General and administrative expenses	\$ 1.9	\$ 1.1

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 outside legal, audit, strategic advisory services, and outsourcing services.

Total general and administrative expenses increased by \$0.8 million for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. There was an increase in consulting fees of approximately \$0.2 million as a result of engaging a consulting firm to assist in preparing the application for a grant from the U.S. Department of Energy and other consulting fees related to implementing new accounting and project management software. There was also an increase in employee wages and benefits of approximately \$0.3 million due to an increase in the number of employees, increase in employee compensation and benefits and an increase in stock-based compensation of approximately \$0.3 million due to the issuance of performance-based stock options in August 2018. Total stock-based compensation included in general and administrative expenses was approximately \$0.4 million and \$0.1 million for each of the three-months ended September 30, 2018 and 2017, respectively.

See Note 7. Stockholders' Equity of the notes to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q for information regarding our stock-based compensation.

Research and Development

The following table presents our research and development expenses (rounded in millions):

	Three Months Ended September 30,	
	2018	2017
Research and development expenses	\$ 0.9	\$ 0.5

Research and development expenses consist mostly of compensation and related overhead costs for personnel responsible for the research and development of our fuel, including work performed for our Enfission joint venture. Total research and development expenses increased by \$0.4 million for the three-months ended September 30, 2018, as compared to the three months ended September 30, 2017. There was an increase in employees, increase in employee compensation and benefits in supporting the research and development activities for Enfission of approximately \$0.1 million, an increase in stock-based compensation of approximately \$0.1 million due to the issuance of performance-based stock options issued in August 2018 and also an increase in professional fees of approximately \$0.1 million due to the work with Enfission. Total stock-based compensation included in research and development expenses was approximately \$0.2 million and \$0.1 million for the three months ended September 30, 2018 and 2017, respectively.

[Table of Contents](#)

All of our above reported research and development activities were conducted in the United States and Russia. We expense research and development costs as they are incurred. Research and development expenses will increase in future periods because we expect to invest \$15 million to \$20 million in the development of our nuclear fuel products over the next 12 to 15 months.

See Note 6. Research and Development Expense of the notes to our condensed consolidated financial statements included in this Quarterly Report Form on 10-Q for additional information about our research and development costs.

Other Operating Income and (Loss) – Related Party

The following table presents our other operating income (rounded in millions):

	Three Months Ended September 30,	
	2018	2017
Other operating income from joint venture	\$ 0.2	\$ -
Equity in loss from joint venture	(1.7)	-
	<u>\$ (1.5)</u>	<u>\$ -</u>

Reported in other operating income is other operating income for activities performed by our employees and consultants for the Enfission joint venture. Total other operating income from these activities was approximately \$0.2 million for the three months ended September 30, 2018. Currently, approximately 80% of the total Enfission cash inflow or capital contributions into Enfission are funded by Lightbridge and the remaining 20% are funded as capital contributions into Enfission from Framatome. Equity in loss from joint venture consists of our share of the allocated loss in Enfission (100%).

Other Income (Expenses)

There was a net increase in other income (expense) of approximately \$0.1 million. This increase was due to a decrease in the amortization of deferred financing costs of approximately \$0.2 million due to the write-off of the deferred financing costs asset recorded for the Aspire option agreement in the first quarter of 2018 (see Note 7. Stockholders' Equity of the notes to the accompanying condensed consolidated financial statements). This decrease was offset by 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 three months ended September 30, 2018 as compared to the three months ended September 30, 2017.

Provision for Income Taxes

The following table presents our provision for income taxes. Our effective tax rate for the periods presented was 25% and 38% for the three months ended September 30, 2018 and 2017, respectively.

	Three Months Ended September 30,	
	2018	2017
Provision for income taxes	<u>\$ -</u>	<u>\$ -</u>

We incurred a pre-tax net loss for both 2018 and 2017. We reviewed all sources of income for purposes of recognizing deferred tax assets and concluded a full valuation allowance for 2018 and 2017 was necessary. Therefore, we did not have a provision for income taxes for the three months ended September 30, 2018 and 2017.

[Table of Contents](#)

Condensed Consolidated Results of Operations – Nine Months Ended September 30, 2018 and 2017

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

	Nine Months Ended September 30,		Increase (Decrease) Change \$	Increase (Decrease) Change %
	2018	2017		
Consulting Revenues	\$ -	\$ 165,046	\$ (165,046)	(100)%
Cost of Services Provided				
Consulting expenses	\$ -	\$ 99,027	\$ (99,027)	(100)%
Gross Profit	\$ -	\$ 66,019	\$ (66,019)	(100)%
Operating Expenses				
General and administrative	\$ 5,566,022	\$ 3,329,440	\$ 2,236,582	67%
Research and development expenses	2,313,124	1,468,650	844,474	58%
Total Costs and Expenses	\$ 7,879,146	\$ 4,798,090	\$ 3,081,056	64%
Other Operating Income and (Loss)				
Other income from joint venture	\$ 790,554	\$ -	\$ (790,554)	(100)%
Equity in loss from joint venture	(4,545,112)	-	4,545,112	100%
Total Other Operating Income and (Loss)	\$ (3,754,558)	\$ -	\$ 3,754,558	100%
Total Operating Loss	\$ (11,633,704)	\$ (4,732,071)	\$ 6,901,633	146%
Total Other Income and (Expenses)	\$ (819,382)	\$ (384,448)	\$ 434,934	113%
Net Loss - Before Income Taxes	\$ (12,453,086)	\$ (5,116,519)	\$ 7,336,567	143%
Net Loss	\$ (12,453,086)	\$ (5,116,519)	\$ 7,336,567	143%

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 continue to provide some consulting services 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 from third parties for the nine months ended September 30, 2018 as compared to the \$0.2 million for the nine months ended September 30, 2017.

Cost of Services Provided

Because we have shifted the focus and resources of the Company to the fuel division and away from consulting, we have not incurred costs related to consulting in 2018. Cost of services provided in 2017 was comprised of expenses related to the consulting, professional, administrative, and other support costs and stock-based compensation allocated to our consulting projects labor, which were incurred to perform and support the work done for our consulting projects.

Total stock-based compensation included in cost of services provided was approximately \$18,000 for the nine months ended September 30, 2017.

[Table of Contents](#)

General and Administrative Expenses

The following table presents our general and administrative expenses, (rounded in millions):

	Nine Months Ended September 30,	
	2018	2017
General and administrative expenses	\$ 5.6	\$ 3.3

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 outside legal, audit, strategic advisory services, and outsourcing services.

Total general and administrative expenses increased by \$2.3 million for the nine-months ended September 30, 2018, as compared to the nine months ended September 30, 2017. There was an increase in professional fees of approximately \$0.8 million, which was due to the increased legal and professional work in negotiating and forming the Enfission joint venture and an increase in other professional and consulting fees, including engaging a consulting firm to assist in preparing the application for a grant from the U.S. Department of Energy. There was also an increase in corporate travel expenses of approximately \$0.1 million, an increase in employee wages and benefits of approximately \$0.4 million due to an increase in the number of employees, increase in employee compensation and employee benefits and an increase in stock-based compensation of approximately \$1.0 million, due to the vesting of performance-based stock options issued in 2017 and the issuance of performance based options in August 2018. Total stock-based compensation included in general and administrative expenses was approximately \$1.2 million and \$0.3 million for the nine months ended September 30, 2018 and 2017, respectively.

See Note 7. Stockholders' Equity of the notes to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for information regarding our stock-based compensation.

Research and Development

The following table presents our research and development expenses (rounded in millions):

	Nine Months Ended September 30,	
	2018	2017
Research and development expenses	\$ 2.3	\$ 1.5

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 increased by \$0.8 million for the nine-months ended September 30, 2018, as compared to the nine months ended September 30, 2017. There was an increase in the number of employees, an increase in employee compensation and employee benefits in supporting research and development activities for Enfission of approximately \$0.3 million, an increase in stock-based compensation of approximately \$0.3 million due to the vesting of performance-based stock options issued in 2017 and the issuance of performance based options in August 2018 and an increase in professional fees related to our Enfission joint venture of approximately \$0.2 million. Total stock-based compensation included in research and development expenses was approximately \$0.7 million and \$0.3 million for the nine months ended September 30, 2018 and 2017, respectively.

All of our above reported research and development activities were conducted in the United States and Russia. We expense research and development costs as they are incurred. Research and development expenses may increase in dollar amount and may increase as a percentage of revenues in future periods because we expect to invest \$15 million to \$20 million in the development of our nuclear fuel products over the next 12 to 15 months.

[Table of Contents](#)

See Note 6. Research and Development expense of the notes to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report Form on 10-Q for additional information about our research and development costs.

Other Operating Income and (Loss) – Related Party

The following table presents our other operating income (rounded in millions):

	Nine Months Ended September 30,	
	2018	2017
Other income from joint venture	\$ 0.8	\$ -
Equity in loss from joint venture	(4.5)	-
	<u>\$ (3.7)</u>	<u>\$ -</u>

Reported in other operating income is other income for activities performed by our employees and consultants for the Enfission joint venture. Total other income from these activities was approximately \$0.8 million for the nine months ended September 30, 2018. Currently, approximately 80% of the total Enfission cash inflow or capital contributions into Enfission are funded by Lightbridge and the remaining 20% will be funded as capital contributions into Enfission from Framatome. Equity in loss from joint venture consists of our share of the allocated loss in Enfission (100%).

Other Income (Expenses)

There was a net decrease in other income of approximately \$0.4 million. This decrease was due to an increase in amortization of deferred financing costs of approximately \$0.6 million due to the write-off of the deferred financing costs asset in the first quarter of 2018, recorded for the Aspire option agreement, (see Note 7. Stockholder's Equity of the notes to the accompanying condensed consolidated financial statements). This decrease was offset by an increase of \$0.2 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, 2018 as compared to the nine months ended September 30, 2017.

Provision for Income Taxes

The following table presents our provision for income taxes. Our effective tax rate for the periods presented was 25% and 38% for the nine months ended September 30, 2018 and 2017, respectively.

	Nine Months Ended September 30,	
	2018	2017
Provision for income taxes	<u>\$ -</u>	<u>\$ -</u>

We incurred a pre-tax net loss for both 2018 and 2017. We reviewed all sources of income for purposes of recognizing deferred tax assets and concluded a full valuation allowance for 2018 and 2017 was necessary. Therefore, we did not have a provision for taxes for both the nine months ended September 30, 2018 and 2017.

[Table of Contents](#)

LIQUIDITY, CAPITAL RESOURCES AND FINANCIAL POSITION

At September 30, 2018, we had cash and cash equivalents of approximately \$25.3 million, as compared to approximately \$4.5 million at December 31, 2017. The \$20.8 million increase in cash and cash equivalents resulted from net proceeds from the sale of approximately \$27.6 million of common stock and net proceeds of \$3.9 million of preferred stock during the nine months ended September 30, 2018. See Note 7. Stockholders' Equity of the notes to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for information regarding our equity transactions. This amount of cash inflow was partially offset by net cash used in operating activities of approximately \$5.3 million and our capital contributions for our capital investment in Enfission of approximately \$5.2 million. We used cash during the nine months ended September 30, 2018 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, 2018 and presently do not expect to have significant consulting revenue for the next 12 months.

We currently project a cash flow shortfall averaging approximately \$0.8 million to \$0.9 million per month over the course of the next 12 to 15 months for our general and administrative expenses. We currently anticipate a minimum amount of cash outlays to third parties for research and development expenditures and equipment purchases of approximately \$15 million to \$20 million, for the next 12 to 15 months. Presently, we fund 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 months, which could reduce our cash flow shortfall, if needed.

The current primary future potential sources of cash available to us in 2018 are equity investments through our ATM agreement, potential funding from other equity investors and potential funding from the Department of Energy. We anticipate that our financing through the ATM agreement in 2018 and other third parties will help us meet the U.S. Department of Energy's ("DOE") minimum cost-sharing requirements that typically range from 20% to 50% of the total project cost (i.e., a 25% to 100% match in Company's cost-sharing contributions is required for each dollar of DOE funding) or even higher in some cases. We have no debt or debt credit lines and we have financed our operations to date through our prior years' consulting revenue and the sale of our preferred stock and common stock. Management believes that the funding amount from the ATM agreement will be available as needed by the Company and that adverse market conditions in the Company's common stock price and trading volume will not substantially impair the Company's ability to raise capital through the ATM, if needed in the future.

Short-Term and Long-Term Liquidity Sources

In addition to the ATM financing and other potential funding discussed above, we may seek new financing or additional sources of capital, depending on the capital market conditions, over the next 12 months. There can be no assurance that some of 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:

1. Equity investment from third party investors in Lightbridge or Enfission; and
2. Strategic investment or cost-sharing contributions through funding from the Department of Energy, and/or other strategic parties, 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 endeavour to create strategic alliances with other strategic 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.

[Table of Contents](#)

We will need to raise additional capital in 2019 to fund our research and development, which may involve offerings of equity or debt securities, securing financing through one or more banks or entering into strategic alliances with other parties.

See Note 7. Stockholder's Equity of the notes to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q for information regarding our ATM financing.

Off Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not Required.

ITEM 4. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

Our management, including our principal executive officer and principal financial officer, evaluated the disclosure controls and procedures related to the recording, processing, summarization and reporting of information in the periodic reports that we file with the SEC. These disclosure controls and procedures have been designed to ensure 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. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of September 30, 2018.

Changes in Internal Controls Over Financial Reporting

There were no changes in our internal control over financial reporting during the period covered by this report that have materially affected or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

[Table of Contents](#)

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. For a description of legal proceedings involving the Company, see the information set forth under “Litigation” in Note 5. Commitments and Contingencies of the notes to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

ITEM 1A. RISK FACTORS

The following should be read in conjunction with, and supplements and amends, the risk factors discussed in Part I, Item 1A of the Company’s Form 10-K for the year ended December 31, 2017. Other than as described in this Item 1A, there have been no material changes to our risk factors from the risk factors previously disclosed in the 2017 Annual Report.

Development of our nuclear fuel technology is dependent upon the availability of a test reactor.

Our fuel designs are still in the research and development stage and further testing and experiments will be required in test facilities. We intended to conduct testing of our fuel designs at the Halden research reactor located in Halden, Norway. However, the Halden research reactor, which became operative in 1958, has closed and will not reopen, so it will not be available for further testing of our fuel designs. The Company is working to find a suitable alternative to generate the irradiation data we need to support regulatory licensing of our lead test assembly operation in a commercial reactor but finding an alternative to the Halden research reactor may delay further testing of our fuel designs, and we may not be able to locate another reactor in which to test our fuel designs. As a result, commercialization of our nuclear fuel technology may be delayed, perhaps indefinitely, which would adversely affect our business, financial condition and results of operations.

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

On September 30, 2018, the holders of the Series A Preferred Shares converted 95,116 preferred shares into 110,530 common shares. The issuance of the common stock was exempt from registration under the Securities Act of 1933, as amended, pursuant to the exemption for transactions by an issuer not involving any public offering under Section 4(a)(2) of the Securities Act.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not Applicable

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable

ITEM 5. OTHER INFORMATION

On November 5, 2018, the Company received a letter from the Listing Qualifications staff of the Nasdaq Stock Market (“Nasdaq”) notifying the Company that for the preceding 30 consecutive business days, the Company’s common stock did not maintain a minimum closing bid price of at least \$1.00 per share as required by Nasdaq Listing Rule 5550(a)(2). The notification letter has no immediate effect on the Company’s listing on the Nasdaq Capital Market.

In accordance with Nasdaq Listing Rule 5810(c)(3)(A), the Company has a grace period of 180 calendar days, or until May 6, 2019, to regain compliance with the minimum closing bid price requirement for continued listing. In order to regain compliance, the closing bid price of the Company’s common stock must be at least \$1.00 per share for a minimum of ten consecutive business days. In the event the Company does not regain compliance by May 6, 2019, the Company may be provided an additional 180-day compliance period, if the Company demonstrates that it meets the applicable market value of publicly held shares requirement for continued listing and all other applicable standards for initial listing on the Nasdaq Capital Market, with the exception of the bid price requirement, and provides written notice of its intention to cure the minimum bid price deficiency during the second grace period, including by implementation of a reverse stock split, if necessary. If the Company fails to qualify for the second grace period or fails to regain compliance during the second grace period, the Company’s stock will be subject to delisting by Nasdaq.

The Company intends to actively monitor the bid price of its common stock and will consider available options to regain compliance with the listing requirements.

EXHIBIT INDEX –

Exhibit Number	Description
<u>10.1*</u>	<u>Amendment Number One to the R&D Services Agreement, deemed effective January 25, 2018, among the Company, Framatome SAS, and Enfission, LLC.</u>
<u>10.2*</u>	<u>Amendment Number Two to the R&D Services Agreement, deemed effective June 20, 2018, among the Company, Framatome SAS, and Enfission, LLC.</u>
<u>10.3</u>	<u>Amendment Number One to the Operating Agreement of Enfission, LLC, deemed effective May 7, 2018, between the Company and Framatome Inc.</u>
<u>10.4*</u>	<u>Amendment Number Two to the Operating Agreement of Enfission, LLC, deemed effective January 25, 2018, between the Company and Framatome Inc.</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 and 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

* Confidential treatment has been requested with respect to the redacted portions of the referenced exhibits. Such provisions have been filed separately with the Securities and Exchange Commission.

[Table of Contents](#)

SIGNATURES

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

Date: November 9, 2018

LIGHTBRIDGE CORPORATION

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

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

[*****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

AMENDMENT NUMBER ONE

TO THE R&D SERVICES AGREEMENT

- (1) **Framatome**, a simplified joint stock company, (“Société par actions simplifiée”), organized and existing under the laws of France, having its registered office at 1 place Jean Millier, 92400 Courbevoie, France, registered at the French Trade registry of Nanterre under the N° 379 041 395 RCS Nanterre, represented by Bernard Fontana, Chief Executive Officer, (hereinafter referred to as “**Framatome**”)
- (2) **Lightbridge Corporation**, 11710 Plaza America Dr., Suite 2000, Reston, Virginia 20190, USA, a Nevada corporation (hereinafter referred to as “**Lightbridge**” or “**LTBR**”)
- (3) **Enfission LLC**, 11710 Plaza America Dr., Suite 2000, Reston, Virginia 20190, USA, a Delaware corporation (hereinafter referred to as “**Enfission**”)

(each of Framatome, Lightbridge and Enfission, a “**Party**” and collectively, the “**Parties**”)

This Amendment Number One (“**Amendment One**”) amends the 14 November 2017 R&D Services Agreement (“**RDSA**” or “**Agreement**”) signed between **AREVA NP SAS** and Lightbridge Corporation (each of AREVA NP and Lightbridge an “**Original Party**” and collectively, the “**Original Parties**”), and shall be deemed effective retroactively as of January 25, 2018.

1. The Original Parties to the RDSA drafted the RDSA in a manner contemplating that a JV to be established between Framatome Inc. (a Framatome U.S. based subsidiary) and Lightbridge would become a party to the RDSA.

As set forth in section 16.3 of the RDSA, in the framework of the French nuclear sector’s reorganization, AREVA NP went through a spin-off of most of its activities to its subsidiary New NP on December 31 2017 (“**Spin-Off**”); the corporate name of New NP has been changed and has been, since January 4th 2018, “Framatome”. As the result of the Spin-Off, Framatome took over, as a whole, all of the rights and obligations of AREVA NP under the RDSA, as of December 31 2017.

On January 25, 2018, Framatome Inc. and Lightbridge formed this JV, naming it Enfission, LLC (“**Enfission**”).

2. Framatome and LTBR now desire to formally add Enfission as a party to the RDSA, and Enfission, LLC, intending to be fully bound by the terms of the RDSA, hereby agrees to become a party to the RDSA, with all rights, privileges, duties and obligations attendant thereto. Amendment One thus amends the RDSA by adding Enfission as a party to the Agreement. As such, the LTBR, Framatome and Enfission, LLC are hereinafter referred to individually as a “**Current Party**” and collectively as the “**Current Parties**” to the RDSA.

[*****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

3. The Current Parties hereby agree to further amend the RDSA as follows:

- A. All references throughout the RDSA to any duties, obligations, rights, privileges and the like to be accorded solely or additionally to the JV once formed or established, shall be interpreted and given effect so as to recognize that Enfission was formed/established as of January 25, 2018.
- B. The names “AREVA NP SAS,” “AREVA NP” and “ANP” used in the preamble of the RDSA, and all uses of such terms throughout the RDSA are deleted and replaced with “Framatome.”
- C. All uses of “Areva, Inc.” throughout the RDSA are deleted and replaced with “Framatome, Inc.”
- D. Section 1.41 (definition of “JV”) is deleted in its entirety and replaced with the following:

1.41 “JV” or “Enfission” means Enfission, LLC, a U.S. limited liability company (LLC), established under the laws of the state of Delaware USA and jointly owned by Framatome, Inc. and Lightbridge.
- E. Section 1.57 (definition of “Parties”) is modified as follows:

1.57 “Parties” means ANP Framatome and LTBR (subject to the provisions of Section 16.3) as controlled (as defined in Section 1.3) at the date of the execution of the present Agreement, and Enfission. “Party” has a correlative meaning.
- F. Section 2 (**Exhibits**) is amended as follows:

[. . .]

(k) Exhibit K (Personnel categories and corresponding Unit Rates); and

(l) Exhibit L (signed and binding Confidentiality Agreement); and

(m) Exhibit M (Purchasing from Authorized Vendors and Vendor Payment Processing).
- G. Section 5.1(b) (**Budget Related to the Roadmap**), ninth paragraph, is modified as follows:

No Party shall have any obligation to implement changes to the Roadmap and/or development schedule, resources, and cost estimates unless previously approved in writing by the Project 1 Steering Committee, and no Party shall have any obligation to make any additional payments to any other Party on account of any such changes, unless the Project 1 Steering Committee has duly approved any such changes and the Parties have agreed to such changes in writing through a new or amended Work Release Notice.

[***] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.**

H. Section 5.2 (**Work Release Notices**) is modified as follows:

- i) The Section 5.2 heading is modified to state:

Work Release Notices and Purchases from Authorized Vendors and Vendor Payment Processing

- ii) After the fourth paragraph, the following language is added:

Enfission personnel shall follow the "Purchasing from Authorized Vendors and Vendor Payment Processing" guidelines set forth in Exhibit M. These guidelines govern the process of purchasing goods and/or services from authorized vendors, and the process of paying authorized vendors for those goods and services.

- I. Section 5.5 (**Subcontracting**) is modified as follows:

- i) After the third paragraph, the following language is added:

For the sake of clarity, the above-mentioned written approval is required for each of the Subcontracted tasks, even if the Subcontractor has already been approved in order to perform another Subcontracted task.

- ii) The fourth paragraph, second sentence is modified to state: These arrangements unless expressly consented to in writing by the other Parties on a case by case basis, shall require that the obligations provided in this Agreement (including without limitation the obligations in Section 6, Section 7, Section 10, and Section 11) shall also apply to such Subcontractors.

- J. Section 9.2 (**Invoicing**) is modified as follows:

i. The first paragraph is modified to state: ~~From the Effective Date to the earlier of the JV formation date, or January 31, 2018, the currency of invoicing or of payment shall be in EURO. The Parties shall execute an amendment to this Agreement prior to such date to ensure that immediately after such date Lightbridge or the JV, as applicable, shall receive invoice; and remit payment in U.S. Dollars. In the amendment, the engineering rates for each R&D Service Provider's European resources shall be converted from EURO to U.S. Dollars at then current spot exchange rate plus the actual and reasonable currency hedging cost incurred by the R&D Service Provider assuming the foreign exchange risk. Upon conversion of the engineering rate; from EURO into U.S. Dollars, such engineering rates. The currency of invoicing or of payment shall be in U.S. Dollars. The engineering rates for each R&D Service Provider's European resources shall remain unchanged until the end of the calendar year. When incurred by Framatome for hedging the EUR/USD currency risk in each applicable calendar year (% to be agreed between the Parties) to the engineering rates in each applicable calendar year.~~

[****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

ii. The fourth paragraph is modified to state: By the end of the first week of each month, each R&D Provider shall send to Accounts Payable at Lightbridge (or the JV, ~~once it is established~~), an electronic copy of its invoice together with the supporting documentation corresponding to the hours spent for each Unit Rate category, for each task, during the previous month by the R&D Provider for the performance of the R&D Activities and any additional expenses incurred during this period as provided under Section 9.3(b). All hours for such previous month shall be timely submitted and invoiced as provided herein. To the extent that the R&D Provider fails to timely submit hours as provided in this paragraph, the JV shall be relieved of all liability for payment of such untimely submitted hours.

K. Section 9.4 (Subcontracting / Investment Expenses) is modified as follows:

Subcontracting activities and investment expenses (such as but not limited to equipment, tools, materials, and licenses) managed by ANP Framatome SAS engineers ~~should~~ shall be invoiced to ~~LTBR (or the JV, once formed)~~. Subcontracting activities conducted by third parties, activities conducted by Framatome technical centers in Karlstein and Erlangen DTI, and Framatome investment expenses shall be invoiced based on actual cost + ANP margin equal to [****]% (value creation by ANP engineers) plus an administrative treatment fee, not to exceed [****]%.

L. The following language is added as new Section 16.14:

Electronic Transmittals and Signatures. The Parties intend to conduct business under this Agreement by electronic means. Each document arising out of or referenced in this Agreement, and which a Party has signed and transmitted electronically to the other (and evidenced by a delivery confirmation receipt), shall be intended as and constitute an original and deemed to contain a valid signature of the Party for all purposes acknowledging, consenting to, authorizing and approving the terms of such document or any subject matter applicable thereto and shall satisfy any and all requirements in this Agreement for a document or signature to be “in writing” or “written”.

M. The Exhibits are amended as follows:

- i. Deleting Exhibit K (Personnel Categories and Corresponding Unit Rates) and replacing the same with the attached updated Exhibit K (Personnel Categories and Corresponding Unit Rates in U.S. Dollars — January 25, 2018 — December 31, 2018)
- ii. Adding, after Exhibit L, the attached Exhibit M (Purchases from Authorized Vendors and Vendor Payment Processing)

All other terms and conditions of the Agreement remain unchanged.

This Amendment One may be executed by the Current Parties in one or more counterparts, all of which shall be considered one and the same, and all of which shall have an effective date of January 25, 2018. All other sections of the RDSA in effect prior to this Amendment One shall continue in full force and effect.

[Signature page follows.]

[***] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.**

IN WITNESS WHEREOF, the undersigned, who are all of the Current Parties to the RDSA, intending to be legally bound, have executed this Amendment One as of the date(s) set forth below, with such Amendment One to be deemed effective as of January 25, 2018.

LIGHTBRIDGE CORPORATION

By: /s/ Seth Grae
Name: Seth Grae
Title: President and Chief Executive Officer

Date: July 2, 2018

FRAMATOME SAS

By: /s/ Bernard Fontana
Name: Bernard Fontana
Title: Chief Executive Officer

Date: July 3, 2018

ENFISSION, LLC

By: /s/ Seth Grae
Name: Seth Grae
Title: President and Chief Executive Officer

Date: July 2, 2018

[****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

Exhibit K

Personnel Categories and Corresponding Unit Rates in U.S. Dollars

January 25, 2018 — December 31, 2018

Framatome SAS / Framatome Inc.

Hedging FX rate utilized: [****] USD to 1 Euro

Personnel category	Unit Rate in US \$/h for US Personnel	Unit Rate in \$/h for non-US Personnel
--------------------	---------------------------------------	--

Expert (France) Advisory Engineer or Technical consultant (US)	[*****]	[*****]
Senior Engineer France) Principal Engineer (US)	[*****]	[*****]
Engineer (France) Engineer III/IV (US)	[*****]	[*****]
Technician/operator (France) Engineer I/II (US)	[*****]	[*****]

Lightbridge

Personnel Category	Unit Rate in US Dollars per Hour
Advisory Engineer or Technical Consultant	[*****]
Principal Engineer	[*****]
Engineer III/W	[*****]
Engineer I/II	[*****]

[*****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

Exhibit M

Purchasing from Authorized Vendors and Vendor Payment Processing

PROCEDURE:	SECTION Number:
Purchasing from Authorized Vendors and Vendor Payment Processing	P2P

I. PURPOSE

The purpose of this policy is to establish formal guidelines governing the process of purchasing goods and/or services from authorized vendors, and over the process of paying authorized vendors for those goods and services.

II. APPLICABILITY

These guidelines apply to all user departments who requisition materials, supplies, services, or equipment. They also apply to the Accounting department responsible for issuing payments to vendors.

III. RESPONSIBILITIES

[****]

IV. DEFINITIONS

Purchase Requisition (PR): represents the request made by a user department with a business need to acquire goods and/or services.

[***] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.**

Purchase Order (PO): is a financially controlled document and all POs must be accounted for and subject to audit. It commits Enfission funds for the value of goods and/or service specified in the PO, and authorizes the vendor to deliver and charge Enfission for the goods and services specified in the PO.

Work Release Notice (WRN): is an agreement between Framatome and Lightbridge companies that establishes the tasks to be performed by the two entities and the corresponding budget cost expected to be incurred to perform and complete those tasks to achieve the objectives of the Enfission joint

venture.

V. GUIDELINES

[*****]

VI. EFFECTIVE DATE

This procedure shall become effective upon approval.

Original

Revision No. 1

APPROVED: [MONTH]/[DAY]/[YEAR]

APPROVED BY:

JOB POSITION

[*****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

AMENDMENT NUMBER TWO

TO THE R&D SERVICES AGREEMENT

This Amendment Number Two (“**Amendment Two**”) amends the 14 November 2017 R&D Services Agreement (“**RDSA**” or “**Agreement**”), as previously amended by Amendment Number One dated June 20, 2018, between Framatome SAS (formerly known as “AREVA NP SAS”, and hereinafter referred to as “**Framatome**”), Lightbridge Corporation (“**Lightbridge**”), and Enfission, LLC (“**Enfission**”) (each of Framatome, Lightbridge and Enfission a “**Party**”, and collectively, the “**Parties**”), and shall be deemed effective as of June 20, 2018.

1. The Parties desire to adjust the Project 1 (as defined in the RDSA) organization based on actual experience during the first several months of activities under the RDSA. The Parties therefore hereby agree to amend the RDSA as follows:

- A. Section 1.61 (definition of “**Project Manager**” or “**PM**”) is modified as follows:

1.61 “**Project Manager Office**” or “**PMO**” has the meaning as described in Section 4.2.

- B. All uses of “**Project Manager**” throughout the RDSA are deleted and replaced with “**Project Management Office**,” and all uses of “**PM**” throughout the RDSA are deleted and replaced with “**PMO**.”

- C. Section 4.2 (**Project Manager**), third paragraph, is modified as follows:

The ~~Project Manager~~ **Project Management Office** is accountable for managing Project 1’s progress, schedule, and costs (both globally and with respect to Sub-Projects), recommending Project reviews to the Project Director and to the Board, submitting reports and recommendations to the ~~Project Director and to the Board~~ **Project 1 Steering Committee and the Board**, and ~~supporting marketing efforts for non-commercial technical R&D Activities on an as needed basis.~~

- D. Section 4.3 (**Project I Steering Committee**) is deleted in its entirety and replaced with the following:

4.3 **Project Director**

The Project Director shall lead Project 1’s day-to-day activities. The Project Director shall receive recommendations from the Sub-Project Leaders before the Project Director makes any decision in the respective Sub-Project Leader’s field of expertise in accordance with the decision-making process described in Section 4.5 hereof. The Project Director shall be responsible for triggering Project reviews by the Board of Directors and supporting marketing efforts for non-commercial technical R&D Activities on an as needed basis. The Project Director shall report directly to the Enfission Vice President for Fuel Development and also to the Board for Project progress and key Project decisions.

[****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

E. Section 1.87 is added as follows:

1.87 **“Project Advisors”** means certain internal and external technical advisors to the Project. Internal Project Advisors (i.e., individuals employed by Lightbridge, Framatome SAS, Framatome Inc., and their affiliates) may be utilized by the Project Core Team as needed. External Project Advisors must be pre-approved by the IP Committee through the Subcontractor approval process prior to their use.

F. Section 1.88 is added as follows:

1.88 **“Project Core Team”** means the Project Director, the Project Management Office and the Sub-Project Leaders.

G. Section 1.89 is added as follows:

1.89 **“Project Director”** shall mean an individual selected by the Parties whose responsibilities are described in Section 4.3.

H. Section 1.62 (definition of **“Project 1 Steering Committee”**) is deleted in its entirety and replaced with the following:

1.62 [omitted]

I. All uses of **“Project 1 Steering Committee”** throughout the RDSA are deleted and replaced with **“Board.”** Any redundant use of the term “Board” in light of the foregoing shall be ignored (*e.g.*, where the Project 1 Steering Committee would have reported to the Board).

J. Section 4.4 (**Sub-Projects**), second paragraph, is modified as follows:

Project I shall be organized in sub-projects (each hereinafter referred to as a **“Sub-Project”**), each under the responsibility of a Sub-Project Leader. The Sub-Project Leader shall be responsible for the coordination of the Sub-Project work, contribution, and deliverables (with respect to time, quality, and cost) and directly reports to the Project ~~Manager~~ Director. The Sub-Project Leaders shall submit their recommendations to the Project Director before the Project Director makes any decision in the respective Sub-Project Leader’s field of expertise.

[****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

- K. Section 4.5 (**Deputy Project Manager—Technical**) is deleted in its entirety and replaced with the following:

4.5 Project Governance Processes

The Project Core Team shall have regular telephonic and in-person communication and meetings, at a frequency that will ensure that information is shared and discussed in a timely manner.

Upon agreement between the Subproject Leader and Project Director for decisions in those areas for which the Subproject Leader is responsible, the Project Director may make decisions or take actions regarding Project 1 for which the Board is otherwise responsible under this Agreement if such action would have no major impact on the Project objectives, cost, schedule or risk; provided, however, that matters subject to the review authority of the IP Committee per the IP Committee's charter (e.g. engagement of third-party subcontractors; sharing of information with third-parties), shall be reviewed and approved by the IP Committee prior to the Project Director making, such a decision or taking such action. Decisions that could have a "major impact" (as defined below) on the Project objectives, cost, schedule or risk, or for "Key Project Steps" (as defined below), or where there is a disagreement between the Subproject Leader and the Project Director, must be expeditiously elevated to the full Board for review and decision. If necessary, the Board can—per procedures in the Enffission Operating Agreement—schedule a special Board meeting and decisions may be approved via unanimous written consent evidenced by email or other electronic means.

A Major Impact for purposes of this paragraph shall mean:

1. Project Objectives — A decision or a series of decisions that would lead to a deliverable not compatible with the Project Objectives as validated by the Board.
2. Project Cost — A decision or a series of decisions that could, in the aggregate, increase by 5% or more: (1) The total annual amount of R&D budge approved by the Board, or (2) The overall Project cost estimate for the Roadmap.
3. Project Schedule — A decision or a series of decisions that could, in the aggregate, cause a 3-month or longer delay to estimated completion dates of any critical path task in the Roadmap or any key milestone set forth by the Board.
4. Project Risk - A decision or a series of decisions that could, in the aggregate, increase the overall Project risk profile by: (1) Adding a new risk with a medium or high probability of occurrence and a high consequence of occurrence, or (2) Increasing an existing risk to a medium or high probability of occurrence and a high consequence of occurrence.

[*****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

A Key Project Step for purposes of this paragraph shall mean:

. [*****]

[*****]

The Project Director and the Project Core Team shall seek advice and expertise from Project Advisors on an as-needed basis, and the Project Advisors shall provide such advice and guidance upon request without further process or reporting expected.

L. Section 1.17 (definition of “**Deputy Project Manager—Technical**”) deleted in its entirety and replaced with the following:

1.17 [omitted]

This Amendment Two may be executed by the Parties in one or more counterparts, all of which shall be considered one and the same, and all of which shall have an effective date of June 20, 2018. All other sections of the RDSA in effect prior to this Amendment Two shall continue in full force and effect.

[Signature page follows]

[***] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.**

IN WITNESS WHEREOF, the undersigned, who are all of the Parties to the RDSA, intending to be legally bound, have executed this Amendment Two as of the date(s) set forth below, with such Amendment Two to be deemed effective as of June 20, 2018.

LIGHTBRIDGE CORPORATION

By: /s/ Seth Grae
Name: Seth Grae
Title: President and Chief Executive Officer

Date: July 2, 2018

FRAMATOME SAS

By: /s/ Bernard Fontana
Name: Bernard Fontana
Title: Chief Executive Officer

Date: July 3, 2018

ENFISSION, LLC

By: /s/ Seth Grae
Name: Seth Grae
Title: President and Chief Executive Officer

Date: July 2, 2018

AMENDMENT NUMBER ONE

TO THE OPERATING AGREEMENT OF ENFISSION, LLC

This Amendment Number One (“**Amendment One**”) to the January 25, 2018 Operating Agreement (“**OA**”) of Enfission, LLC, a Delaware limited liability company (the “**Company**”), amends the existing OA and shall be deemed effective as of May 7, 2018.

In accordance with OA Section 7.6(a), Lightbridge Corporation and Framatome Inc., (each a “**Member**” and collectively, all of the “**Members**” of the Company) hereby approve the following Amendments to the OA (double underline indicates added language and strikethrough indicates deleted language):

1. Section 3.1(e) The Capital Contributions, Membership Interests and Percentage Interests of each Member are set forth on Exhibit A, which shall be amended from time to time, as necessary and in a timely fashion to reflect (i) the Transfer by a Member of its Membership Interests in accordance with Article IX, (ii) the issuance of New Securities or admission of a new Member in accordance with Section 7.2(k)(vii), (iii) Additional Capital Contributions made by the Members in accordance with Section 4.2, and (iv) such other events as otherwise may give rise to a change in a Member’s Capital Contributions or ownership of its Membership Interests under this Agreement. Upon any change in a Member’s Capital Contributions or ownership of its Membership Interests, the Board of Directors shall amend Exhibit A to properly reflect such change, and the Board of Directors shall deliver a copy of Exhibit A, as so amended, to each Member. For the avoidance of doubt, a transaction or event discussed in this Section 3.1(e) could cause a change in one or more of Capital Contributions, Membership Interests and Percentage Interests without causing a change in the others.

2. Section 6.1 Distributions Other Than Liquidation Proceeds. The Company shall not make any distributions to the Members except (i) as authorized by the Board of Directors in accordance with Section 7.2(k)(v), or (ii) as specified in this Section 6.1. Subject to Net Available Cash as determined by the Board of Directors, the ~~Company Board~~ may authorize the Company to make cash distributions as a result of income from the Company’s operations in respect of the Members’ Tax liabilities as a result of the Company’s income at least five days prior to the installment due dates specified in Section 6655(c) of the Code, ~~pro rata to each Member in proportion to the Member’s Percentage Interest.~~ Any amounts designated for distribution shall be distributed, subject to the Act, pro rata in proportion to accordance with the Members’ respective Percentage Interests Capital Accounts. The requirement that distributions be in proportion to the Members’ respective Capital Accounts shall apply to the tax distributions discussed in this Section 6.1, notwithstanding that this may result in one Member receiving more than is necessary to satisfy its Tax liability. Representative examples of and calculations for distributions that could be authorized by the Board under this Section 6.1 and Section 7.2(k)(v) are included in Exhibit A-1. For the avoidance of doubt, the Board is not obligated to make distributions to the Members, whether the Members’ Capital Accounts are equal or otherwise. When distributions are made to the Members they will be made pro rata in proportion to the Members’ Capital Accounts.

3. Updated Exhibit A (see attached)

4. New Exhibit A-1 (see attached)

Exhibit A

CAPITAL CONTRIBUTIONS AND MEMBERSHIP INTERESTS

Member	Capital Contribution	Membership Interests	Percentage Interest
Framatome	\$10,000	1,000 Class A Membership Units	50%
Lightbridge	\$10,000	1,000 Class A Membership Units	50%

* Additional Capital Contributions made by Lightbridge to the Company will be included in this Exhibit and will be in the form of contributed rights to IP that Lightbridge owns by virtue of its work and funding of any R&D Services Agreement. These contributed rights will be in the form of a license to the Company of Lightbridge co owned IP developed under the R&D Services Agreement. The contribution credit that Lightbridge will receive to its capital account in return for the contributed rights shall be equal to the fair market value of such contributed rights at the time of the contribution (at the time of Company formation), which the Members agree shall be derived from the R&D expenditures that Lightbridge has made (and for which it has not been reimbursed) plus the amount it has paid to Framatome under the R&D Services Agreement up to the time of such contribution.

Membership Interests

Member	Membership Interests	Percentage Interest
Framatome	1,000 Class A Membership Units	50%
Lightbridge	1,000 Class A Membership Units	50%

Capital Contributions

Member	Capital Contribution	Date	Type
Framatome	\$10,000	1.25.18	Initial Contribution
	\$207,000	3.24.18	Additional Contribution
Total	\$217,000		
Lightbridge	\$365,915	1.25.18	Pre-formation R7D Expenses
	\$10,000	1.25.18	Initial Contribution
	\$5,207,000	3.28.18	Additional Contribution
Total	\$5,582,915		

EXHIBIT A-1

DISTRIBUTION CALCULATIONS (REPRESENTATIVE EXAMPLES)

Example 1

On March 20, the BOD, giving consideration to projected Capital Accounts and cash at March 31, votes to make a \$2,000,000 distribution payable April 15 based on Capital Accounts at March 31.

The initial capital accounts were zero. The transactions through March 31 were as follows:

	Lightbridge	Framatome	Total
Initial cash capital contribution	\$ 10,000	\$ 10,000	\$ 20,000
Deemed contribution of IP	500,000		500,000
Cash contributions	5,200,000		5,200,000
Contributions required for 25% of payments to Framatome		250,000	250,000(A)
Allocation of net loss	(1,000,000)		(1,000,000)(B)
Ending capital accounts - March 31	4,710,000	260,000	4,970,000
	94.7686%	5.2314%	100.0000%
Distribution	(1,895,372)	(104,628)	(2,000,000)
Capital Accounts after distributions	\$ 2,814,628	\$ 155,372	\$ 2,970,000

(A) Entire \$1,000,000 loss consists of amounts paid to Framatome for R&D triggering a 25% required contribution under Section 4.2(f) of the Operating Agreement.

(B) 100% allocation of net loss to Lightbridge to get capital accounts as close as possible to 50%/50% as required under section 8.4(b). of the Operating Agreement.

A required but unpaid contribution by Framatome results in a receivable. For purposes of determining the allocation of distributions the recording of the receivable increases Framatome's Capital Account. The BOD may decide to offset a distribution, in whole or in part, against the receivable (i.e. consider a portion of the distribution paid by forgiveness of the receivable).

Example 2

On March 20, the BOD votes to make a distribution, based on March 31 Capital Accounts, payable April 10, to cover the members' estimated tax payments based on first quarter net income. Net income is \$800,000 all allocated to Framatome. Framatome's combined federal, state and local income tax rate is assumed to be 30%. The tax payment to Framatome would be \$240,000 (\$800,000 @ 30%). Based on the March 31 capital accounts as shown below, the distribution would need to be \$516,923.08 in order for the distribution to be in accordance with the Capital Accounts and still get the required \$240,000 to Framatome.

In this example, net income for purposes of accounting under the Operating Agreement is assumed to equal taxable income,

	Lightbridge	Framatome	Total
Opening Capital Accounts - January 1	\$ 3,000,000.00	\$ 1,800,000.00	\$ 4,800,000.00
Allocation of net income		800,000.00	800,000.00(C)
Ending capital accounts- March 31	3,000,000.00	2,600,000.00	5,600,000.00
	53.5714%	46.4286%	100.0000%
Distribution	(276,923.08)	(240,000.00)	(516,923.08)
Capital Accounts after distributions	\$ 2,723,076.92	\$ 2,360,000.00	\$ 5,083,076.92

(C) 100% allocation of net income to Framatome to get capital accounts as close as possible to 50%/50% as required by Section 8.4(b) of the Operating Agreement.

Example 3

On December 20, 2022 the BOO, giving consideration to projected Capital Accounts and cash projected at December 31, 2022, votes to make a \$1,800,000 distribution payable January 15, 2023 based on Capital Accounts at December 31 2022.

The 2022 activity and the subsequent distributions were as follows:

	Lightbridge	Framatome	Total
Opening Capital Accounts -January 1, 2022	\$ 5,000,000	\$ 3,200,000	\$ 8,200,000
Cash distributions during the year	(1,200,000)	(1,000,000)	(2,200,000)(D)
Allocation of net income	-	1,300,000	1,300,000(E)
Ending capital accounts - December 31, 2022	3,800,000	3,500,000	7,300,000
	52.0548%	47.9452%	100.0000%
Distribution	(936,986)	(863,014)	(1,800,000)

Capital Accounts after distributions	\$ 2,863,014	\$ 2,636,986	\$ 5,500,000
--------------------------------------	--------------	--------------	--------------

(D) Distributions during the year were not in proportion to opening Capital Accounts because net income through various interim dates changed the proportions.

(E) 100% allocation of net income to Framatome to get capital accounts as close as possible to 50%/50% as required by Section 8.4(b) of the Operating Agreement.

This Amendment One may be executed by the Members in one or more counterparts, all of which shall be considered one and the same, and all of which shall have an effective date of May 7, 2018. All other sections of the OA in effect prior to this Amendment One shall continue in full force and effect.

[Signature page follows.]

IN WITNESS WHEREOF, the undersigned, who are all of the Members of the Company, intending to be legally bound, have executed this Amendment One as of the date(s) set forth below, with such Amendment One to be effective as of May 7, 2018,

LIGHTBRIDGE CORPORATION

By: /s/ Seth Grae
Name: Seth Grae
Title: President and Chief Executive Officer

Date: May 8, 2018

FRAMATOME INC.

By: /s/ Robert Freeman
Name: Robert Freeman
Title: Vice President, Fuel Commercial and Customer
Center

Date: May 8, 2018

[*****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

AMENDMENT NUMBER TWO

TO THE OPERATING AGREEMENT OF ENFISSION, LLC

This Amendment Number Two (“**Amendment Two**”) to the January 25, 2018 Operating Agreement (“**OA**”) of Enfission, LLC, a Delaware limited liability company (the “**Company**”), amends the existing OA and shall be deemed effective as of the original signing date of the Operating Agreement, January 25, 2018.

In accordance with OA Section 7.6(a), Lightbridge Corporation and Framatome Inc., (each a “**Member**” and collectively, all of the “**Members**” of the Company) hereby approve the following Amendments to the OA (double underline indicates added language and strikethrough indicates deleted language):

1. Section 4.2 (Additional Capital Contributions) [. • .]

(f) The Initial Members agree that their cash and/or non-cash contributions to the Company will be made in such a manner that their capital accounts ultimately will be balanced. [*****]

This Amendment Two may be executed by the Members in one or more counterparts, all of which shall be considered one and the same, and all of which shall have an effective date of January 25, 2018. All other sections of the OA in effect prior to this Amendment Two shall continue in full force and effect, and all actions taken by the Enfission Board of Directors and Enfission Management consistent with the terms of this Amendment Two are hereby ratified and confirmed.

[Signature page follows.]

[***] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.**

IN WITNESS WHEREOF, the undersigned, who are all of the Members of the Company, intending to be legally bound, have executed this Amendment Two as of the date(s) set forth below, with such Amendment Two to be effective as of January 25, 2018.

LIGHTBRIDGE CORPORATION

By: /s/ Seth Grae
Name: Seth Grae
Title: President and Chief Executive Officer

Date: September 13, 2018

FRAMATOME INC.

By: /s/ Robert Freeman
Name: Robert Freeman
Title: Vice President, Fuel Commercial and Customer Center

Date: September 13, 2018

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 9, 2018

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 9, 2018

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, 2018, 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 9, 2018

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)