

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **January 16, 2025**

LIGHTBRIDGE CORPORATION

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction
of incorporation)

001-34487

(Commission
File Number)

91-1975651

(IRS Employer
Identification No.)

11710 Plaza America Drive, Suite 2000

Reston, VA 20190

(Address of principal executive offices, including zip code)

(571) 730-1200

(Registrant's Telephone Number, Including Area Code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a -12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d -2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e -4(c))

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

Title of Each Class:

Common Stock, \$0.001 par value

Trading Symbol(s):

LTBR

Name of Each Exchange on Which Registered:

The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

Emerging growth company ☐

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

Item 1.01 Entry into a Material Definitive Agreement.

On January 16, 2025, Lightbridge Corporation (“Lightbridge” or the “Company”) and Battelle Energy Alliance, LLC (“Battelle”), the operating contractor of Idaho National Laboratory, entered into Modification No. 3 (“Modification No. 3”) to the Project Task Statement under the Cooperative Research and Development Agreement, dated September 27, 2022, as amended, by and between the Company and Battelle. Pursuant to the terms of Modification No. 3, the potential amounts payable by the Company to Battelle for its expenses and employee time were increased by approximately \$1.6 million, bringing the total estimated cost for the work to be performed under the “Umbrella” Cooperative Research and Development Agreement, described below, to \$5.4 million. Additionally, the Company will provide a one time installment payment of \$600,000 that may be drawn upon by Battelle. After that point, the Company will resume monthly payments based on invoices.

As previously disclosed, on December 9, 2022, the Company entered into initial releases with Battelle in collaboration with the U.S. Department of Energy (“DOE”), which releases set forth the initial scopes of work and funding commitments under an “Umbrella” Strategic Partnership Project Agreement and an “Umbrella” Cooperative Research and Development Agreement (together, the “Agreements”), each dated September 27, 2022, between the Company and Battelle. Under the Agreements, the Company is responsible for most expenses and will reimburse Battelle for its expenses and employee time, and Battelle and DOE will contribute feedstock materials for the fabrication of ingots and extrusion of billets. Battelle will also fabricate irradiation capsule hardware and assemble the experiment with fuel coupons and irradiate the experiment in the Advanced Test Reactor (“ATR”). Each Agreement has an initial term of seven years from the effective date.

Pursuant to the initial releases, the Company is working with Battelle at Idaho National Laboratory to fabricate a delta-phase enriched uranium/zirconium alloy ingot that is suitable for extruding fuel coupon specimens in accordance with Lightbridge Fuel™ specifications, and irradiate the extruded fuel coupon specimens in the ATR at Idaho National Laboratory. After accounting for Modification No. 3, cash payments from Lightbridge to Battelle under both Agreements are estimated at approximately \$6.4 million (excluding project contingencies) on a cost reimbursable basis over the performance periods under the initial releases.

The foregoing summary of Modification No. 3 does not purport to be complete and is qualified in its entirety by reference to the full text of Modification No. 3, a copy of which is attached hereto as Exhibit 10.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
10.1 ▲	Modification No. 3 to the Project Task Statement, dated January 16, 2025, under the Cooperative Research and Development Agreement, dated December 9, 2022, by and between Lightbridge Corporation and Battelle Energy Alliance, LLC.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

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

SIGNATURES

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

LIGHTBRIDGE CORPORATION

Dated: January 17, 2025

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

CRADA No. [REDACTED] PTS-1, Mod 3

MODIFICATION NO. 3 TO
UMBRELLA COOPERATIVE RESEARCH AND DEVELOPMENT
AGREEMENT NO. [REDACTED], PTS-1

PROJECT TASK STATEMENT**No. 1****BETWEEN**

Battelle Energy Alliance, LLC
(hereinafter “Contractor” or “BEA”)

AND

Lightbridge Corporation
(hereinafter “Participant” or “Lightbridge”)

01/13/2025**Supply of Enriched Uranium and Materials for Coupon and Experiment Irradiation**

This Project Task Statement (PTS) is under the authority and subject to all terms and conditions of Umbrella Cooperative Research and Development Agreement (CRADA) No. [REDACTED].

This Modification No. 3 is to increase the Participant’s funds-in contribution by \$1,642,127.17 and add an Installment Payment to the Payment Terms in Section E.

A. PURPOSE

This PTS is focused upon the assembly of the experiment for irradiating Lightbridge fuel alloy (U-Zr) within the Advanced Test Reactor (ATR). This work is based upon the final design documents produced by work funded through a Gateway for Accelerating Innovation in Nuclear (GAIN) voucher. Tasks in this PTS include the following work:

- Development of the quality implementation plan;
- Provision of materials
- Assembly of experiment;
- Final analysis of experiment;
- Irradiation of experiment at ATR;
- Disposition of materials.

Reasons for Cooperation

See Annex A, Statement of Work, Mod 0 dated 04/07/2022 to CRADA No. [REDACTED].

Public Abstract

Lightbridge Corporation, as a US nuclear fuel company, is seeking irradiation data necessary to advance the technical readiness level (TRL) of its fuel designs and to eventually qualify

them for use within light water reactors (LWR), including water-cooled small modular reactors. Idaho National Laboratory (INL), as the US's premier nuclear fuel laboratory, is an ideal location for Lightbridge Corporation to perform this development as it can support the fabrication, assembly, irradiation, and post-irradiation examination (PIE) of the fuel experiments. Battelle Energy Alliance, LLC is interested in this collaboration as it is the lead fuel testing laboratory for the Department of Energy and its mission is to support industry development of nuclear technology, irradiation testing, and characterization.

B. SCOPE

Duration of PTS

The period of performance of this PTS is [REDACTED]

Technical Objectives

The development of the irradiation experiment for Lightbridge will be done in accordance with (IAW) design documents created at INL (Reference: FOR-572). This process will include the development of a project Quality Implementation Plan (QIP) that meets expectations from both Lightbridge and BEA. BEA and DOE will contribute materials such as depleted and enriched uranium feedstocks for the fabrication of ingots and extrusion billets (with casting and extrusion to be performed under a separate SPP agreement). BEA will fabricate irradiation capsule hardware and assemble the experiment with fuel coupons. Lastly, BEA will irradiate the experiment in the ATR.

Tasks and Division of Responsibilities

Task 1: Create Quality Implementation Plan

[illegible]

Task 2: Experiment Preparation

Task 2.1: Experiment Design

[REDACTED]
[REDACTED]

Task 2.2: Provision of Materials

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

Task 3: Pre-Irradiation Characterization of Coupons

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

Task 4: Fabrication, Assembly, and Irradiation of Experiment

Task 4.1 Fabrication and Assembly

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

Task 4.2 Irradiation Operation and Shipping

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

Task 4.3 Test History Summary Report

[REDACTED]
[REDACTED]
[REDACTED]

Task 5: Quality Assurance Confirmation of Work

[REDACTED]
[REDACTED]
[REDACTED]

Task 6: Final disposition of materials

[REDACTED]
[REDACTED]
[REDACTED]

Deliverable: N/A**Task 7: Financial and Project Performance Reporting**

Task No.	Task	Contractor Role/Responsibilities	Participant Role/Responsibilities
1	Create Quality Implementation Plan	[REDACTED]	[REDACTED]
2.1	Experiment Design	[REDACTED]	[REDACTED]
2.2	Material Provision	[REDACTED]	[REDACTED]
3	Pre-Irradiation Characterization of Coupons	[REDACTED]	[REDACTED]
4.1	Assembly of Experiment	[REDACTED]	[REDACTED]
4.2	Irradiation of experiment	[REDACTED]	[REDACTED]

Task No.	Task	Contractor Role/Responsibilities	Participant Role/Responsibilities
		[REDACTED]	[REDACTED]
4.3	Final Irradiation Report	[REDACTED]	[REDACTED]
5	Confirmation of Quality Requirements	[REDACTED]	[REDACTED]
6	Disposition of Materials	[REDACTED]	[REDACTED]

Hold Points

Task No.	Do not proceed to:	Until this is completed:
1	2	[REDACTED]
3	4	[REDACTED]
4.1	4.2	[REDACTED]
6	6	[REDACTED]

Assumptions and Exclusions:

A number of assumptions have been made in the preparation of this PTS:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

C. TECHNICAL CONTACTS

For Contractor:

[REDACTED]

For Participant:

[REDACTED]

D. PROJECT MANAGEMENT CONTACTS

For Contractor:

[REDACTED]

For Participant:

[REDACTED]

E. FUNDING AND COSTS

The Participant's estimated contribution is \$5,400,362.83, which includes \$1,172,471.00 in-kind and \$4,227,891.83 funds-in, to the Laboratory. The Government's estimated contribution is material and facility access, which is provided through BEA's contract with DOE.

Payment Terms:

[REDACTED]

The Participant shall pay the Contractor as follows:

A. [REDACTED]

B. Monthly Payments. [REDACTED]

C. Installment Payment. [REDACTED]

F. **PERSONAL PROPERTY**

None

G. **BACKGROUND INTELLECTUAL PROPERTY**

Section G provides each Party the opportunity, as a matter of goodwill but not legal obligation, to declare its interests in Intellectual Property that has been created in the "background", i.e., before or outside this PTS. The purpose is to forestall disputes over what is and what is not Generated Information.

Each Party may use another Party's Background Intellectual Property identified in this PTS solely in performance of research and development under the PTS. This PTS does not grant or promise to grant to a Party any option, grant, or license to commercialize, or otherwise use another Party's Background Intellectual Property. Licensing of Background Intellectual Property, if agreed to by the Parties, shall be the subject of separate licensing agreements between the Parties.

Each Party has used reasonable efforts to list all relevant Background Intellectual Property, but Intellectual Property may exist that is not identified. No Party shall be liable to another Party because of any failure to list Background Intellectual Property.

BEA/INL elects to declare an interest in the following Background Intellectual Property: None

Lightbridge elects to declare an interest in the following Background Intellectual Property: See Exhibit A, Mod 0 dated 01/26/2022.

[Remainder of this Page Intentionally Left Blank]

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties hereto have executed this Project Task Statement Modification No. 3 by their authorized representatives on the dates shown below.

BATTELLE ENERGY ALLIANCE, LLC:

Name: [REDACTED]

Title [REDACTED]

Date: January 16, 2025

Signature: [REDACTED]

LIGHTBRIDGE CORPORATION:

Name: Andrey Mushakov

Title Exective Vice President, Nuclear Ops.

Date: January 16, 2025

Signature: [REDACTED]