

*** Certain identified information has been excluded from this exhibit because it is both not material and the type the registrant treats as private or confidential

SPP No. [REDACTED], PTS-5

PROJECT TASK STATEMENT

No. 5

BETWEEN

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

AND

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

10/16/2025

Post Irradiation Examination of Coupons

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

A. PURPOSE

The post-irradiation examination (PIE) of fuel specimens is an important component of any fuel design qualification and performance quantification. The work will include developing test plans and capabilities to support PIE, perform PIE of test capsules and fuel samples, and characterizing microstructural and compositional features of the final extruded product. Any necessary development test will be done with depleted uranium (DU) or surrogate samples. After the process is proven successful, it will be performed on irradiated material.

B. SCOPE

Duration of PTS

The period of performance of this PTS is [REDACTED] from the effective date. The effective date of this Agreement shall be the latter date of (1) the date on which it is signed by the last of the Parties or (2) the date on which the Facility Contractor receives the advance funding from the Sponsor.

Technical Objectives

This PTS is focused on the PIE of Lightbridge LB-1 fuel samples with planned irradiation at the Advanced Test Reactor (ATR):

- Determining tests and developing plans to quantify irradiated fuel performance;
- Developing new capabilities (if necessary) to perform identified PIE;
- Performing non-destructive and destructive examinations; and
- Final data package documentation and transmittal.

Task 3: PIE Non-Destructive Examinations

[REDACTED]

Task 3.1: Capsule Disassembly

[REDACTED]

Task 3.2: Visual Inspection

[REDACTED]

Task 3.3: Neutron Radiography

[REDACTED]

Task 3.4: Gamma Scan

[REDACTED]

Task 4: PIE Destructive Examinations

[REDACTED]

Task 4.1: Fission Gas Puncture and Analysis

[REDACTED]

Task 4.2: Dimensional Inspections

[REDACTED]

Task 4.3: Sectioning Performance

[REDACTED]

Task 4.4: Fuel Optical Metallography

[REDACTED]

Task 4.5: Fuel Microstructure Microhardness Testing

[REDACTED]

Task 4.6: Fuel Scanning Electron Microscopy (SEM)

[REDACTED]

Task 4.7: Fuel Transmission Electron Microscopy (TEM)

[REDACTED]

[REDACTED]

[REDACTED]

Task 4.8: Shielded Electron Probe Microanalysis (EPMA)

[REDACTED]

[REDACTED]

Task 4.9: Fuel Thermal Conductivity

[REDACTED]

[REDACTED]

Task 4.10: Fuel Slug Density

[REDACTED]

[REDACTED]

Task 4.11: X-Ray Diffraction (XRD)

[REDACTED]

[REDACTED]

Task 4.12: Fuel Isotopic & Chemical Analysis

[REDACTED]

[REDACTED]
[REDACTED]

Task 5: Irradiated Fuel Performance Report

[REDACTED]

Task No.	Task	Contractor Role/Responsibilities	Sponsor's Role
1	[REDACTED]	[REDACTED]	[REDACTED]
2	[REDACTED]	[REDACTED]	[REDACTED]
3	[REDACTED]	[REDACTED]	[REDACTED]
4	[REDACTED]	[REDACTED]	[REDACTED]
5	[REDACTED]	[REDACTED]	[REDACTED]

Hold Points

Hold Point No.	Do not proceed to:	Until this is completed:
1	Task No. 2, 3, or 4	[REDACTED]
2	Task 4	[REDACTED]
3	Project Closeout	[REDACTED]

C. ASSUMPTIONS

[REDACTED]

[REDACTED]

D. TECHNICAL CONTACTS

For Contractor:

[REDACTED]

For Sponsor:

[REDACTED]

E. PROJECT MANAGEMENT CONTACTS

For Contractor:

[REDACTED]

For Sponsor:

[REDACTED]

F. COSTS

1. The Contractor estimated cost for the work to be performed under this Agreement is \$5,000,000.00.
2. The Contractor has no obligation to continue or complete performance of the work at a cost in excess of its estimated cost, including any subsequent amendment.
3. The Contractor agrees to provide at least 30 days' notice to the Sponsor if the actual cost to complete performance will exceed its estimated cost.

Payment Terms:

[REDACTED]

A. Advance Payment.

[REDACTED]

B. Monthly Payments.

[REDACTED]

G. FINANCIAL AND PROJECT PERFORMANCE REPORTING

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

IN WITNESS WHEREOF, the Parties hereto have executed this Project Task Statement by their authorized representatives on the dates shown below.

BATTELLE ENERGY ALLIANCE, LLC:

Name:

[REDACTED]

Title

Date: November 13, 2025

Signature:

[REDACTED]

LIGHTBRIDGE CORPORATION:

Name:

Andrey Mushakov

Title

Executive Vice President, Nuclear Ops.

Date:

December 9, 2025

Signature:

[REDACTED]