

*** 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-2

PROJECT TASK STATEMENT

No. 2

BETWEEN

Battelle Energy Alliance, LLC
Management and Operating Contractor of the Idaho National Laboratory
(hereinafter "Contractor" or "BEA")

AND

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

10/16/2025

Fuel Qualification Plan Support

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

Idaho National Lab (BEA) will provide technical consultation to Lightbridge on the drafting of a Fuel Qualification Plan (FQP). This may include the performance of a Failure Mode Effects Analysis (FMEA), a Phenomena Identification Ranking Table (PIRT) analysis, or other similar activities to help determine research and development needs in support of Lightbridge fuel qualification. Lightbridge will ultimately remain responsible for drafting and ownership of the fuel qualification plan as well as any documents to be submitted to the Nuclear Regulatory Commission.

B. SCOPE

Duration of PTS

The period of performance of this PTS is [REDACTED] months from the effective date. The effective date of this Agreement shall be the later 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 funding from the Sponsor.

Technical Objectives

This PTS is focused on describing the activities that BEA will support Lightbridge in the development of an FQP. These activities will engage several experts from multiple technical disciplines to ensure that the FQP considers impacts on fuel performance from mechanical, thermal-hydraulic, neutronic, and material perspectives. The technical goal of the FQP is to outline the necessary data and activities for Lightbridge to identify the fuel safety envelope as defined by NUREG-2246. Tasks in this PTS cover the following work:

- Provide input/guidance on potential safety related phenomena under normal operating conditions (inclusive of anticipated operational occurrences [AOOs]) and transient conditions and how existing expectations of current LWR fuels may be impacted by transitions to Lightbridge fuel.
- Provide input/guidance on potential fission product release during AOOs or transient conditions and potential impacts to specified acceptable fuel design limits.

- Input and guidance will be provided in the context of an advanced fuel as defined by NUREG-2246 and relevant chapters of NUREG-0800.
- A Failure Mode Effects Analysis (FMEA) and Phenomena Identification Ranking Table (PIRT) analysis will be performed to help Lightbridge determine necessary R&D activities in support of Lightbridge fuel qualification. These analyses will include multi-disciplinary experts in the fields of mechanical engineering, reactor physics, materials engineering, thermal-hydraulics, and other relevant fields.

Tasks and Division of Responsibilities

Task 1: Quality Assurance Implementation Plan for Lightbridge Fuel Qualification Planning

[REDACTED]

Task 2: FMEA & PIRT

Task 2.1: Identification of applicable failure modes

[REDACTED]

Task 2.2: PIRT Support

[REDACTED]

Task 2.3: Effects/Consequences analysis

[REDACTED]

[REDACTED]

Task 3: Fuel Qualification Activities Identification

[REDACTED]

Task 4: Fuel Qualification Activities Dependencies Review

[REDACTED]

Task 5: Fuel Qualification Risk Analysis

[REDACTED]

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

Task No.	Task	Contractor Role/Responsibilities	Sponsor's Role
3			
4			
5			

Hold Points

Task No.	Do not proceed to:	Until this is completed:
1	2	[REDACTED]

C. ASSUMPTIONS

- Principal drafting of the FQP is performed by Lightbridge.
- Adequate expertise is available to support the activities within the project execution period.
- FQP activities are governed and treated as non-safety related with special treatment. Special treatment applied includes control of certifications and qualifications of personnel, collection of operating experience, and adherence to quality assurance implementation planning.

TECHNICAL CONTACTS

For Contractor:

[REDACTED]

For Sponsor:

[REDACTED]

D. PROJECT MANAGEMENT CONTACTS

For Contractor:

[REDACTED]

For Sponsor:

[REDACTED]

E. COSTS

1. The Contractor estimated cost for the work to be performed under this Agreement is \$505,550.00.
2. The Contractor has no obligation to continue or complete performance of the work at a cost in excess of its estimate 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]

[REDACTED]

A. Advance Payment

[REDACTED]

B. Monthly Payments

[REDACTED]

[REDACTED]

[REDACTED]

F. 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 EAC/ETC 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.

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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: [REDACTED]
Date: November 13, 2025
Signature: [REDACTED]

LIGHTBRIDGE CORPORATION:

Name: Andrey Mushakov
Title: Executive Vice President, Nuclear Ops.
Date: November 20, 2025
Signature: [REDACTED]