

*** 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

CRADA No. [REDACTED], Mod 1

MODIFICATION NO. 1 TO
STEVENS-ON-WYDLER (15 USC 3710a)
COOPERATIVE RESEARCH AND DEVELOPMENT
AGREEMENT (hereinafter "CRADA") No. [REDACTED]

BETWEEN

Battelle Energy Alliance, LLC (BEA)
under its U.S. Department of Energy Contract
No. [REDACTED] (hereinafter "Contractor")

AND

Lightbridge Corporation
(hereinafter "Participant"),

both being hereinafter referred to singularly as "Party" and jointly as "Parties."

WHEREAS, all Parties have entered into the above identified CRADA and desire to amend said Agreement.

NOW THEREFORE, the Parties hereby agree to extending the term of the CRADA term and clarifying the Statement of Work by modifying as follows:

1. Article II: Statement of Work Term, Funding and Costs, Subsection A, Annex A is deleted in its entirety and replaced with Statement of Work, Rev. 1 dated 09/18/2025.
2. Article II: Statement of Work, Term, Funding and Costs, Subsection C, is hereby deleted in its entirety and replaced with the following:

The effective date of this CRADA and any PTS 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 contractor receives advance funding, if applicable, from the Participant. The work to be performed under this CRADA shall be completed from [REDACTED] through [REDACTED].

All other terms and conditions of the Agreement shall remain unchanged and in full force and effect.

BATTELLE ENERGY ALLIANCE, LLC:

LIGHTBIDGE CORPORATION:

Name: [REDACTED]

Name: Andrey Mushakov

Title: [REDACTED]

Title: Executive Vice President, Nuclear Ops.

Date: 11/04/2025

Date: November 5, 2025

Signature: [REDACTED]

Signature: [REDACTED]

ANNEX A
STATEMENT OF WORK, Rev. 1
09/18/2025
UMBRELLA CRADA No. [REDACTED]
Supply of Enriched Uranium, Experiment Design and Test Rig Fabrication, and
Irradiation Testing in ATR and TREAT

A. PURPOSE

Reasons for Cooperation

Lightbridge Corporation (Lightbridge, Participant), located in Reston, Virginia, is a nuclear fuel technology development company. Lightbridge is developing proprietary next-generation nuclear fuel technologies for use in current and future reactors that significantly enhances the economics and safety of nuclear power, operating at about 1,000°C cooler than standard fuel. The purpose is to improve reactor economics through power uprates, longer fuel cycles, and the potential for increased carbon credits while adding non-emitting baseload electricity with dramatically improved reactor safety. Lightbridge is focusing its development efforts primarily on demonstrating its metallic fuel rod technology and a fuel assembly design for power uprates and longer fuel cycle in existing pressurized water reactors, as well as providing fuel for water-cooled small modular reactors.

Battelle Energy Alliance, LLC, (BEA, Contractor) the management and operating contractor of Idaho National Laboratory (INL), located in Idaho Falls, Idaho, operates the lead nuclear laboratory for the U.S. Department of Energy (DOE). BEA's nuclear engineering expertise draws upon multiple disciplines required to analyze, design, demonstrate, deploy, and operate nuclear systems. These include capabilities in neutronics, thermal hydraulics, structural-design analyses for small- and large-scale experiments, mechanistic and probabilistic safety and other risk analyses, development of robust materials for the nuclear environment, and development of destructive and nondestructive nuclear materials detection and safeguards technologies.

BEA also hosts unique, unparalleled irradiation and post-irradiation examination (PIE) facilities. For steady state irradiation testing, the Advanced Test Reactor (ATR) provides the ability to tailor irradiation experiments to a variety of conditions. Transient testing is also available through the Transient Test Reactor (TREAT) where unique thermal-hydraulic behaviors can be investigated. Both reactors are supported by world class fabrication and assembly facilities that can utilize conventional and more advanced fabrication methods.

Lightbridge, as a US nuclear fuel company, is seeking irradiation data necessary to advance the technical readiness level (TRL) of its fuel concept and to eventually qualify it for use within light water reactors (LWR), including water-cooled small modular reactors. INL, as the US's premier nuclear fuel laboratory, is an ideal location for Lightbridge to perform this development as it can support the fabrication, assembly, irradiation, and PIE of the fuel experiments. BEA is interested in this collaboration as it is the lead fuel testing laboratory for the Department of Energy (DOE) and its mission is to

support industry development of nuclear technology, irradiation testing, and characterization.

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 concept and to eventually qualify it 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. INL 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 CRADA

The period of performance of this CRADA is from [REDACTED] through [REDACTED].

CRADA Phase Descriptions

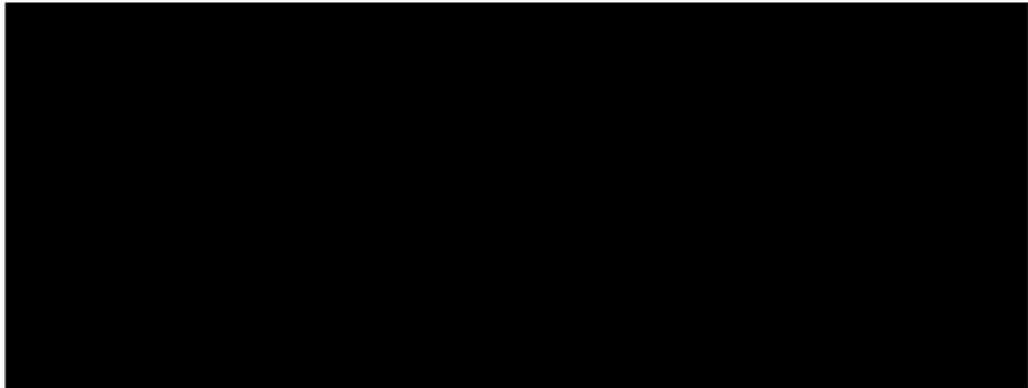
CRADA Phase 1: Fabricate, Assemble, and Irradiate Coupon Experiment in ATR

[REDACTED]

CRADA Phase 2: Fabricate, Assemble, and Irradiate Lightbridge Fuel in ATR

[REDACTED]

CRADA Phase 3: Fabricate, Assemble, and Irradiate Lightbridge Fuel in TREAT



C. ESTIMATED COST

The estimated contribution by the Participant and the Government for each cooperative research project shall be as set forth in the specific Project Task Statements (PTS's) entered under this CRADA, subject to available funding, and in accordance with conditions set forth in Section E. of each PTS.

D. TECHNICAL CONTACTS

Name /Title	Organization	Phone/Email
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

E. PROPERTY

Any tangible property that will be acquired or produced will be listed in each PTS, along with a declaration of who will pay for it and who will own it. All uranium material supplied by DOE shall remain the property of DOE. The Parties will agree on a suitable disposition path for the irradiated samples at the end of the project.

F. QUALITY ASSURANCE

For each of the CRADA phases described above, a quality implementation plan will be developed to provide direction for the quality management oversight of the work activities during the phase. The quality implementation plan for a particular phase will be included within or referenced within the detailed PTS for that work and will be approved by Lightbridge prior to initiation of that work. It is intended that these quality implementation plans will be developed using a "graded approach" depending on the safety significance and complexity of each phase set of activities. However, it may be

acceptable to use one overall quality implementation plan for the duration of all phases if acceptable to and approved by Lightbridge.