


# Digitizing Utilities Prize Round 2

## VOUCHER GUIDELINES

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# 1 Introduction

The U.S. Department of Energy's (DOE's) Office of Electricity (OE), with additional support from DOE's Office of Cybersecurity, Energy Security, and Emergency Response (CESER), in partnership with the National Renewable Energy Laboratory (NREL), launched Round 2 of the American-Made Digitizing Utilities Prize. Round 2 of the Digitizing Utilities Prize aims to connect utilities with interdisciplinary teams of software developers, data experts and cybersecurity experts to transform data analytics & system digitization and address cybersecurity threats and risks.

Round 2 of the Digitizing Utilities Prize offers $1.925 million in cash and a total voucher pool of $225,000 to help entrepreneurs and utilities to develop and refine their solutions which address both utility data and cybersecurity challenges.

This new, scalable approach to rapid product development not only provides innovators with cash prizes, but also activates 17 national laboratories to help accelerate commercialization of American energy innovation. In addition to cash prizes and support from the Network, the program offers contest winners non-cash prize awards[1] in the form of vouchers. These vouchers will allow winners to access tools, equipment, and expertise at national laboratories.

This document provides details about how winners can use the vouchers. The intent of this voucher system is to allow Utility Digitization/Data Challenge Track prize winners from the Progress Phase of Round 2 of the Digitizing Utilities Prize to leverage the capabilities of the national laboratories to further develop the winners' concepts. NREL, as the Prize Administrator, will manage administrative activities related to vouchers.

# 2 Voucher Overview

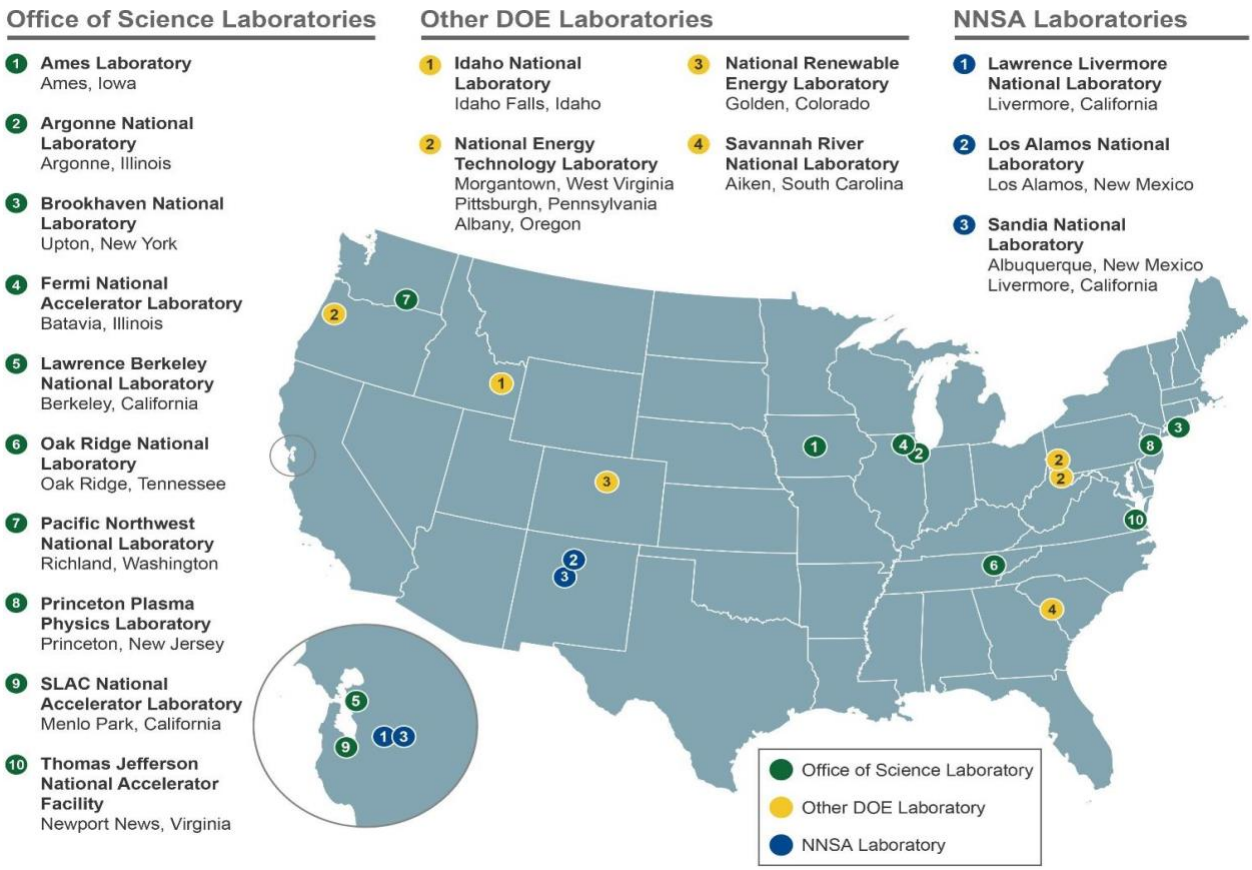
The vouchers allow Utility Digitization/Data Challenge track prize winners from the Progress Phase of Round 2 of the Digitizing Utilities Prize to access tools, equipment, and expertise at national laboratories so that they may develop, test, and validate their innovative solutions.

The Utility Digitization/Data Challenge track winners of the Progress Phase will each receive a $75,000 national laboratory voucher. The Prize Admin will help competitors administer their voucher by identifying the appropriate national laboratory with the available expertise, researchers, and facilities. All voucher funds will be sent to the national laboratory performing the voucher work and must be used entirely at a single national laboratory. Voucher funds may not be redeemed for cash or transferred.

The National Laboratories may provide competitors with:

- Access to hardware and development tools,
- Testing and validation capabilities,
- Other expert services that may be negotiated between the winners and the lab, organization, or facility.

See the map below for the list of all 17 national labs.



# 3 Voucher Process

The process for vouchers issued under the Progress Phase consists of the following steps designed to pair competitors with the National Laboratories that are capable of providing valuable assistance for their specific projects. This process starts with winners of the Progress Phase being announced and progresses through the following steps:

I. **Announcement** — Using industry expert reviewer scores and comments, DOE will review and make winner selections. Only winners of the Utility Digitization/Data Challenge Progress Phase will receive a $75,000 voucher.
II. **Proposal** — Competitors will submit descriptions of their technical challenges and preferred national laboratories in a to be provided form by the Prize Admin.
III. **Matchmaking** — The Prize Admin will help connect competitors with PIs at National Labs as needed.
IV. **Perform** — Competitors negotiate the required Voucher Statement of Work (SOW) with the identified national laboratory they would like to work with. Winners finalize the SOW, and once completed, forward the SOW to the Prize Administrator for review. The Prize Administrator will provide feedback on whether the SOW contains activities that qualify for voucher work. Qualified activities must adhere to the policies described in this document and relate to work that is directly in alignment with progressing the solution or product and/or advancing power sector data analytics technologies. Competitors and National Laboratory researcher staff can renegotiate the SOW and resubmit if they so choose, as competitor needs may change over time. The National Laboratories will then perform the work and receive compensation in accordance with the payment process described below.

# 4 Voucher Use Policies

The following terms specify the voucher use policy for the Round 2 of the Digitizing Utilities Prize Progress Phase:

- **Voucher Recipients** — Only Utility Digitization/Data Challenge Progress Phase winners will receive vouchers.
- **Voucher Redemption** — Competitors may use a voucher only at a single DOE national laboratory.
- **Allowable work** — All work conducted by the National Laboratories and funded through vouchers must be exclusively dedicated to advancing the competitor's innovation selected in the Progress Phase. For example, funds may be used for prototyping, developing, testing, or validating the innovation. When considering whether work will advance a particular innovation, the Prize Administrator will look to tangible and measurable outcomes related to advancing the innovation. Costs of the work must be reasonable. No alcohol, food, travel, or other personal expenses will be allowed.
- **Arms-Length Transactions** — The relationship between a competitor and National Laboratory researchers should avoid actual conflicts of interest or the appearance of conflicts of interest. A competitor and National Laboratory researchers should act independently and should not have any relationship to each other beyond providing services. All parties must be acting in their own self-interest and not be subject to any pressure or duress from the other party.
- **Process Compliance** — All competitors agree to adhere to the requirements contained in this document. Failure to follow these requirements may limit competitors' ability to acquire voucher funds.
- **Use or Lose** — Competitors must submit Voucher Statements of Work to the Prize Administrator for review within 90 calendar days of being matched with a national laboratory researcher. Failure to do so may result in forfeiture of voucher funds. Vouchers will expire 1 year after the winners of the Progress Phase are announced. Vouchers cannot be redeemed for cash and may not be transferred to other parties.

# 5 Voucher Payments

The following are mandatory for using Voucher funds at a national laboratory:

- **Statement of work** — All projects must have a statement of work (SOW) describing the proposed project scope to be covered with the voucher funds. A statement of work template is included in Appendix A. SOWs can be developed collaboratively by the teams and the lab staff who will be conducting work for them, but lab staff will finalize the SOW and submit the final product to the NREL Prize Administrator via digitizingutilitiesprize@nrel.gov.
- **Budget** — When constructing an SOW, all teams should work with the lab to also define a draft budget and clearly describe how the voucher funds will cover the proposed SOW.
- Requirements for working with NREL specifically:
    - Depending on timing and what is required by the teams, there may be a delay in getting access to specific equipment or researchers. NREL will do its best to try to expedite requests from Digitizing Utilities teams as much as possible.
    - To use their voucher funds at NREL, a competitor must enter into a more formal and structured relationship with the lab through a Cooperative Research And Development Agreement (CRADA). A signed CRADA gives a competitor maximum collaborative flexibility with a national lab and allows additional private funds to be used to expand the SOW. It also defines ownership of any intellectual property developed during voucher-funded work as well as other specifics of the collaboration. At any point, competitors may request a consultation with a national lab to explore CRADA options, discuss a SOW, and negotiate a budget prior to confirming voucher eligibility. When a signed CRADA between a competitor and a national lab exists, the Prize Administrator will directly transfer the required voucher funds to the lab covering the work outlined in the voucher SOW. Please contact the Prize Administrator for additional details and benefits of a CRADA. A draft CRADA is included in Appendix B.

Voucher projects at national laboratories other than NREL will require an additional step:

- After completing and signing an SOW with the competitor, a DOE national laboratory completes an MPO utilizing the provided SOW and budget paperwork (see statement of work template in Appendix A). If a competitor wants to work with a lab other than NREL, the Prize Administrator will directly transfer the allocated voucher funds to the selected lab to perform the work as specified in the MPO. Once the transfer occurs, the selected national laboratory must accept the funds to complete the transfer and set up the funding structure for the researchers. The actual timing for each lab funds transfer will depend on the individual labs, but the Prize Administrator will work closely with all selected labs to ensure a smooth and quick funds transfer process. If work under this MPO is not completed within 1 year of the time the competitor wins the prize, the funds will be returned to NREL.
- Once competitors identify work at a lab other than NREL, they should contact the prize administrator for further guidance on how to process their voucher funds through the other lab.

# Appendix A

Alliance for Sustainable Energy, LLC
Managing and Operating Contractor of the National Renewable Energy Laboratory
Cooperative Research and Development Agreement
No. CRD-XX-XXXXX

## Appendix A - Joint Work Statement

**[Blue text is instructional and should be deleted]**

**Notice**: By signing the CRADA, the Participant acknowledges in advance that its entity name and the title and non-proprietary abstract of CRADA work are available for public release by the Contractor without further notice.

**I. Project Title:**
[Project Title and Sales Force opportunity title should match exactly]

**II. Non-Proprietary Abstract of CRADA Work:**
[Insert a 1-2 sentence, non-proprietary summary of the work to be performed.]

**III. Parties to this agreement:**

Contractor: Alliance for Sustainable Energy, operator of the National Renewable Energy Laboratory under Prime Contract No. DE-AC36-08GO28308 for the U.S. Department of Energy (DOE). Contractor has a facility at 15013 Denver West Parkway, Golden, CO 80401.
[NREL/Alliance should be referred to as "Contractor" throughout the document]

Participant: [Business name, location]
[Business entity should be referred to as "Participant" throughout the document]

Participant Type: ☐ Foreign, ☐ University, ☐ Small Business, ☐ Large Business,
☐ State & Local Government, ☐ Not-for-Profit [Check all that apply]

**IV. Purpose:**
[Insert a broad statement of the goals of the collaboration, both for the work now identified and work which may possibly be added in the future. Background information can be included.]

**V. Statement of Work:** Task Descriptions, Deliverables, and Estimated Completion Dates
[Describe the work to be done and any relevant methodology details. Include any items (i.e., equipment, data) Participant is expected to provide that are essential for Contractor's completion of tasks. Include any associated timeline or milestone, if applicable. Work should demonstrate collaboration between Parties and specific tasks allocated to responsible party(ies). (e.g. The Participant will provide X. The Contractor will perform X.)

**Task 1:**

**Task 2:**
…
**Task X**: **Additional Tasks-** Contractor will perform other work at the direction of the Participant, consistent with the scope and subject to the availability of funding. [Allows for additional work to be added to the project without a modification to the agreement. Optional]

**Task X:** The Parties will prepare a CRADA Final Report: Preparation and submission in accordance with the terms of this agreement. [Please be sure to budget for this required report.]

**Deliverables Table:**
[The tangible results/outcome of the work or of each task, if applicable. Please do not repeat task narrative. Use estimated time periods from effective date (i.e., days, weeks, months) rather than specific dates in case of delays.]

| **Associated Task #** | **Deliverable** | **Responsible Party** | **Estimated Completion** (following Effective Date) |
|---|---|---|---|
| 1 | 1.1 [Example: Prototype] | [Contractor, Participant, or both] | [1 month] |
| 1 | 1.2 [Example: Analysis Report] | [Contractor, Participant, or both] | [2 months] |
| 2 | 2.1 [Example: Draft report feedback] | [Contractor, Participant, or both] | [1 month from receipt of draft report*] |
| 3 | 3.1 [Example: PowerPoint Presentation] | [Contractor, Participant, or both] | [1 month] |
| 4 | 4.1 [Example: Draft report] | [Contractor, Participant, or both] | [1 month from completion of Task 1] |
| 4 | 4.2 CRADA Final Report | Contractor and Participant | [Prior to expiration of the Period of Performance] |

[Optional notice: *completion contingent on receipt of Participant's (data, equipment, samples, etc.)]

## VI. Schedule:
The Period of Performance for this effort is ____ months/years from agreement effective date as defined in Article II of the Terms and Conditions.

## VII. Funding Table:
["Contractor In-Kind" refers to funding Contractor has received from DOE which will cover all or a portion of Contractor's costs in performance of this Statement of Work. "Participant In-Kind" is required and is the amount the Participant is contributing to cover all of its own costs during performance of this Statement of Work. The value of Participant's loaned property should be included in the Participant's In-Kind amount. Contractor's lab equipment used on

site would not be included. "Participant Funds-In" is the amount of funding that will be provided by Participant to Contractor to cover all or a portion of Contractor's costs in performance of this Statement of Work.]

| Estimated Costs | Contractor In-Kind | Participant In-Kind | Participant Funds-In | Totals |
|---|---|---|---|---|
| Year 1 | $ 00.00 | $ 00.00 | $ 00.00 | $ 00.00 |
| Year 2 | $ 00.00 | $ 00.00 | $ 00.00 | $ 00.00 |
| Year 3 | $ 00.00 | $ 00.00 | $ 00.00 | $ 00.00 |
| TOTALS | $ 00.00 | $ 00.00 | $ 00.00 | $ 00.00 |
| Fed Admin Charge on Funds-in | ---- | ---- | $ 00.00 | $ 00.00 |

[Principal Investigator to complete 1-5 of this section]
**DOE Mission Area to benefit from this CRADA:**
☐ Energy, ☐ Environmental Quality, ☐ Science, ☐ Other (identify)

**CRADA benefit to DOE, Participant, and US Taxpayer:**
☐ *Assists laboratory in achieving programmatic scope,* ☐ *adds new capability to the laboratory's core competencies,* ☐ *enhances the laboratory's core competencies,* ☐ *uses the laboratory's core competencies, and/or* ☐ *enhances U.S. competitiveness by utilizing DOE developed intellectual property and/or capabilities.*

**DOE Program Manager:** [Name, Phone Number, Email Address]

**The Proposed CRADA will be based upon**: ☐ DOE Model CRADA, ☐ Short Form CRADA, ☐ Multi-lab CRADA, ☐ other (identify)

**Notices to the Parties:**
Any communications required by this CRADA, if given by postage, prepaid, first-class U.S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the date of receipt of such communication by the addressee, or on the date given if by verified facsimile. Address changes shall be made by written notice and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this CRADA. The addresses, telephone numbers, email, and email addresses for the Parties are as follows:

A. FORMAL NOTICES AND COMMUNICATIONS, COPIES OF REPORTS

Participant:
[Name]
[Business Name]
[Address]
[City, State Zip Code]
[Phone number]
[Email Address]

Contractor:
[Name of Agreement Specialist]
Technology Transfer Office
National Renewable Energy Laboratory,
15013 Denver West Parkway, MSXXX
Golden, CO 80401-3393
[Phone number]
[Email Address]

B. PROJECT MANAGERS, REPORTS, COPIES OF FORMAL NOTICES AND COMMUNICATIONS:

Participant:
[Name]
[Business Name]
[Address]
[City, State Zip Code]
[Phone number]
[Email Address]

Contractor:
[Name of Principal Investigator]
National Renewable Energy Laboratory,
15013 Denver West Parkway, MSXXX
Golden, CO 80401-3393
[Phone number]
[Email Address]

**Special Considerations:**

1. **Background Intellectual Property?** (e.g., inventions or copyrightable software, etc.)**:**
   ☐ No ☐ Yes; If yes, list: [See Appendix B]

2. Is Participant interested in licensing Background Intellectual Property:
   ☐ No ☐ Yes; If yes, please identify any known impediments for such licensing: [If BIP is still in ROI stage, or already exclusively licensed, or has broader applications than scope of CRADA, or in contention right now with another partner.]
   [If none, write "NONE."].

3. **Are human or animal subjects to be used as part of this CRADA?**
   ☐ No ☐ Yes; If yes, before the CRADA can be executed, approvals must be obtained from the Institutional Review Board or the Animal Care and Use Committee.

4. **Have all necessary ES&H and quality (NEPA) reviews been completed?**
   ☐ Yes ☐ No

5. Are there any organizational or personal conflicts of interest associated with this CRADA?
   ☐ No ☐ Yes; If yes, explain:
   Contractor maintains on file signed COI certificates for each employee with a substantial role in this CRADA.

6. **Will export controlled information be used or produced?**
   ☐ No ☐ Yes; If yes, identify:

7. **How was Fairness of Opportunity determined?**
   ☐ Participant approached laboratory
   ☐ Participant responded to FBO (Federal Business Opportunity)
   ☐ Participant was contacted by laboratory after or during broad public announcement
   *(Supporting documentation is to be maintained in CRADA file.)*

8. **For 100% funds-in CRADAs, the Participant has been notified of other types of technology transfer agreements, such as a Strategic Partnership Projects agreement.**
   ☐ Yes ☐ No ☐ N/A

9. **Did the Participant require any substantive changes to the laboratory/field-approved DOE Model CRADA or any changes to double-underlined language?**
   ☐ No ☐ Yes; If yes, attach copies of the proposed modified articles. If substantively altered, attach Participant's US Competitiveness justification.

10. **Does any Party currently plan to engage a subcontractor(s) to perform any of the work specified herein?**
    ☐ No ☐ Yes; If yes, provide subcontractor name(s) and describe portion of work such subcontractor(s) will perform, to the extent these are known at this time.

11. **Additional Special Considerations:** [Enter any special considerations for reviewers or "None"]

# Appendix B

**Shared Resource**
**Cooperative Research and Development Agreement**

STEVENSON-WYDLER (15 USC 3710)
COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT
(hereinafter "CRADA") No. CRD-YR-XXXXX

between

**Alliance for Sustainable Energy, LLC**,
Manager and Operator of the National Renewable Energy Laboratory
under its U.S. Department of Energy Contract No. DE-AC36-08GO28308
15013 Denver West Parkway, Golden, CO 80401
(hereinafter “Contractor”)

And

<Name>
<Address>
<City, State, Zip>
(hereinafter "Participant"),

both being hereinafter jointly referred to as the "Parties".

## ARTICLE I: DEFINITIONS

A. “Background Intellectual Property” means the Intellectual Property, if any, identified by the Parties in an Appendix titled “Background Intellectual Property”, which was in existence prior to or is first produced outside of this CRADA, except that in the case of inventions in those identified items, the inventions must have been conceived outside of this CRADA and not first actually reduced to practice under this CRADA to qualify as Background Intellectual Property.

B. “Contracting Officer” means the DOE employee administering the Contractor’s DOE contract.

C. “DOE” means the Department of Energy, an agency of the Federal Government.

D. “Generated Information” means information, including data, produced in the performance of this CRADA.

E. “Government” means the Federal Government of the United States of America and agencies thereof.

F. “Intellectual Property” means patents, trademarks, copyrights, mask works, Protected CRADA Information, and other forms of comparable property rights protected by Federal law and foreign counterparts, except trade secrets.

G. “Proprietary Information” means information, including data, which is developed at private expense outside of this CRADA, is marked as Proprietary Information, and embodies (i) trade secrets or (ii) commercial or financial information which is privileged or confidential under the Freedom of Information Act (5 U.S.C. 552 (b)(4)).

H. “Protected CRADA Information” means Generated Information which is marked as being Protected CRADA Information by a Party to this CRADA and which would have been Proprietary Information had it been obtained from a non-Federal entity.

I. “Subject Invention” means any invention of the Contractor or Participant conceived or first actually reduced to practice in the performance of work under this CRADA.

J. “Computer Software” means (i) computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and (ii) recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that would enable the computer program to be produced, created, or compiled.

## ARTICLE II: STATEMENT OF WORK, TERM, FUNDING AND COSTS

A. The Joint Work Statement is attached as Appendix A.

B. Notices: The names, postal addresses, telephone and email addresses for the Parties are provided in the Joint Work Statement. Any communications required by this CRADA, if given by postage prepaid first class U.S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the addressee, or on the date given if by email. Address changes shall be made by written notice and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this CRADA.

C. The effective date of this CRADA 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 it is approved by DOE The work to be performed under this CRADA shall be completed within __ months/years from the effective date.

D. The Participant’s estimated in-kind contribution is $_____. The Government’s estimated contribution, which is provided through the Contractor’s contract with

DOE, is $_____, subject to available funding. The total estimated value of this CRADA is $_____.

**ARTICLE III: PERSONAL PROPERTY**

All tangible personal property produced or acquired under this CRADA shall become the property of the Participant or the Government, depending upon whose funds were used to obtain it unless identified in the Joint Work Statement as being owned by the other Party. Personal property shall be disposed of as directed by the owner at the owner's expense. All jointly funded property shall be owned by the Government. The Participant shall maintain records of receipts, expenditures, and the disposition of all Government property in its custody related to the CRADA.

**ARTICLE IV: DISCLAIMER**

*THE GOVERNMENT, THE PARTICIPANT, AND THE CONTRACTOR MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY,OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT. NEITHER THE GOVERNMENT, THE PARTICIPANT, NOR THE CONTRACTOR SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ATTRIBUTED TO SUCH RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA.*

**ARTICLE V: PRODUCT LIABILITY**

Except for any liability resulting from any negligent acts, willful misconduct or omissions of the Contractor and the Government, the Participant indemnifies the Government and the Contractor for all damages, costs, and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using, or selling of a product, process, or service by or on behalf of the Participant, its assignees, or licensees, which was derived from the work performed under this CRADA. In respect to this article, neither the Government nor the Contractor shall be considered assignees or licensees of the Participant, as a result of reserved Government and Contractor rights. The indemnity set forth in this paragraph shall apply only if the Participant shall have been informed as soon and as completely as practical by the Contractor and/or the Government of the action alleging such claim and shall have been given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense, and the Contractor and/or the Government shall have provided all reasonably available information and reasonable assistance requested by the Participant. No settlement for which the Participant would be responsible shall be

made without the Participant's consent unless required by final decree of a court of competent jurisdiction.

## ARTICLE VI: RIGHTS IN SUBJECT INVENTIONS

Wherein DOE has granted the Participant and the Contractor the right to elect to retain title to their respective Subject Inventions, and wherein the Participant has the option to choose an exclusive license, for reasonable compensation, for a pre-negotiated field of use to the Contractor's Subject Inventions,

A. Each Party shall have the first option to elect to retain title to any of its Subject Inventions and that election shall be made: (1) for the Participant, within 12 months of disclosure of the Subject Invention to DOE or (2) for the Contractor, within the time period specified in its prime contract for electing to retain title to Subject Inventions. However, such election shall occur not later than 60 days prior to the time when any statutory bar might foreclose filing of a U.S. Patent application. The electing Party has one year to file a patent application after such election unless any statutory bar exists. If a Party elects not to retain title to any of its Subject Inventions or timely file a patent application, it shall promptly notify the other Party. Such notification shall be delivered no later than 60 days prior to the statutory bar date. The other Party shall have the second option to elect to obtain title to such Subject Invention within one year of notification and file a patent application within one year after such election unless any statutory bar exists, or no less than 30 days prior to a statutory bar, if any. For Subject Inventions that are joint Subject Inventions of the Contractor and the Participant, title to such Subject Inventions shall be jointly owned by the Contractor and the Participant.

B. The Parties agree to assign to DOE, as requested by DOE, the entire right, title and interest in any country to each Subject Invention where the Parties (1) do not elect pursuant to this article to retain/obtain such rights, or (2) elect to retain/obtain title to a Subject Invention but fail to have a patent application filed in that country on the Subject Invention or decide not to continue prosecution or not to pay any maintenance fees covering the Subject Invention. If DOE is granted a patent on Participant's Subject Invention, the Participant may request a non-exclusive license and DOE will determine whether to grant such license pursuant to statutory authority.

C. The Parties acknowledge that the Government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States every Subject Invention under this CRADA throughout the world. The Parties agree to execute a Confirmatory License to affirm the Government's retained license.

D. The Parties agree to disclose to each other each Subject Invention which may be patentable or otherwise protectable under U.S. patent law. The Parties agree that

the Contractor and the Participant will disclose their respective Subject Inventions to DOE and each other within two (2) months after the inventor first discloses the Subject Invention in writing to the person(s) responsible for patent matters of the disclosing Party.

These disclosures should be in sufficiently complete technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, and operation of the Subject Invention. The disclosure shall also identify any known actual or potential statutory bars, e.g., printed publications describing the Subject Invention or the public use or "on sale" of the Subject Invention. The Parties further agree to disclose to each other any subsequently known actual or potential statutory bar that occurs for a Subject Invention disclosed but for which a patent application has not been filed. All Subject Invention disclosures shall be marked as confidential under 35 U.S.C. 205.

E. The Parties agree to include within the beginning of the specification of any U.S. patent applications and any patent issuing thereon (including non-U.S. patents) covering a Subject Invention, the following statement: "This invention was made under a CRADA (identify CRADA number) between (name the Participant) and (name the laboratory) operated for the United States Department of Energy. The Government has certain rights in this invention."

F. The Parties acknowledge that DOE has certain march-in rights to any Subject Inventions in accordance with 48 CFR 27.304-1(g) and 15 U.S.C. 3710a(b)(1)(B) and (C).

G. The Participant agrees to submit, for a period of five (5) years from the date of termination or completion of this CRADA and upon request of DOE, a nonproprietary report no more frequently than annually on efforts to utilize any Intellectual Property arising under the CRADA including information regarding compliance with U.S. Competitiveness provision of this CRADA.

H. The Participant has the option for 6 months after a Contractor Subject Invention is disclosed to the Participant to choose an exclusive license in the Contractor Subject Invention within a defined field of use on agreed-upon reasonable terms and conditions, including the payment of negotiated license fees and royalties.

## ARTICLE VII: RIGHTS IN DATA

A. The Parties agree that they shall have no obligations of nondisclosure or limitations on their use of, and the Government shall have unlimited rights in, all Generated Information produced and information provided by the Parties under this CRADA, except for restrictions on data provided for in this Article or data disclosed in a Subject Invention disclosure being considered for Patent protection.

B. PROPRIETARY INFORMATION: Each Party agrees to not disclose Proprietary Information provided by the other Party to anyone other than the CRADA Participant, Contractor and its subcontractors (if any) performing work under this CRADA without written approval of the providing Party, except to Government employees who are subject to the statutory provisions against disclosure of confidential information set forth in the Trade Secrets Act (18 U.S.C. 1905). Government employees shall not be required to sign non-disclosure agreements due to the provisions of the above-cited statute.

If Proprietary Information is orally disclosed to a Party, it shall be identified as such, orally, at the time of disclosure and confirmed in a written summary thereof, appropriately marked by the disclosing Party, within ten (10) days as being Proprietary Information.

All Proprietary Information shall be protected for a period of five (5) years from the effective date of this CRADA, unless such Proprietary Information becomes publicly known without the fault of the recipient, shall come into recipient's possession without breach by the recipient of any of the obligations set forth herein, can be demonstrated by the recipient by written record that it is known prior to receipt from disclosing party, is disclosed by operation of law, or is independently developed by recipient's employees who did not have access to such Proprietary Information.

Proprietary Information in tangible form shall be returned to the disclosing Party or destroyed with a certificate of destruction submitted to the disclosing Party upon termination or expiration of this CRADA, or during the term of this CRADA upon request by the disclosing Party.

C. PROTECTED CRADA INFORMATION: Except where a Participant's Federal funding agreement prohibits such protection, each Party may designate and mark as Protected CRADA Information any Generated Information produced by its employees, which meets the definition in Article I and, with the agreement of the other Party, so designate any Generated Information produced by the other Party's employees which meets the definition in Article I. All such designated Protected CRADA Information shall be appropriately marked.

For a period of five (5) years from the date Protected CRADA Information is produced, the Parties agree not to further disclose such information and to use the same degree of care and discretion, but no less than reasonable care and discretion, to avoid disclosure, publication or dissemination of such information to a third party, as the Party employs for similar protection of its own information which it does not desire to disclose, publish, or disseminate except:

(1) as necessary to perform this CRADA;

(2) as published in a patent application or an issued patent before the protection period expires;

(3) as provided in Article X [REPORTS AND PUBLICATIONS];

(4) as requested by the DOE Contracting Officer to be provided to other DOE facilities for use only at those DOE facilities solely for Government use only with the same protection in place and marked accordingly.

(5) when a specific maximum time period for delaying the public release of data is authorized in the terms of a Government funding agreement used to fund this CRADA and that maximum period is shorter than the time period set forth in this Article for protecting Protected CRADA Information;

(6) to existing or potential licensees, affiliates, customers, or suppliers of the Parties in support of commercialization of the technology with the same protection in place. Disclosure of the Participant's Protected CRADA Information under this subparagraph shall only be done with the Participant's consent; or

(7) as mutually agreed to by the Parties in advance.

The obligations of this paragraph shall end sooner for any Protected CRADA Information which shall become publicly known without fault of either Party, shall come into a Party's possession without breach by that Party of the obligations of paragraph above, or shall be independently developed by a Party's employees who did not have access to the Protected CRADA Information. Federal Government employees who are subject to 18 USC 1905 may have access to Protected CRADA Information and shall not be required to sign non-disclosure agreements due to the provisions of the statute.

D. COPYRIGHT: The Parties may assert Copyright in any of their Generated Information. Assertion of Copyright generally means to enforce or give an indication of an intent or right to enforce such as by marking or securing Federal registration. Copyrights in co-authored works by employees of the Parties shall be held jointly, and use by either Party shall be without accounting.

COMPUTER SOFTWARE: For all Computer Software produced in the performance of this CRADA, the Parties shall provide an Announcement Notice, AN 241.4 Software Announcement Notice, along with providing the source code, the executable object code and the minimum support documentation needed by a competent user to understand and use the Computer Software to DOE's Energy Science and Technology Software Center (ESTSC) via www.osti.gov/estsc. The source code of the Computer Software may be marked as Protected CRADA Information in accordance with this Article; however, the Government's use of the executable object code is governed by the applicable license below.

For Generated Information that is Copyrighted Computer Software produced by a Party, the Party shall inform DOE's ESTSC when it abandons or no longer commercializes the Copyrighted Computer Software. Until such notice to ESTSC, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable, nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government. (narrow license). After the Party owning the Copyrighted Computer Software abandons or no longer commercializes the Copyrighted Computer Software, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable, nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. (broad license). For all other Generated Information where a Party asserts copyright in copyrightable works produced in the performance of this CRADA, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable, nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, subject to the restrictions this Article places on publication of Proprietary Information and Protected CRADA Information.

The Parties agree to place Copyright and other notices, as appropriate for the protection of Copyright, in human-readable form onto all physical media, and in digitally encoded form in the header of machine-readable information recorded on such media such that the notice will appear in human-readable form when the digital data are off loaded or the data are accessed for display or printout.

## ARTICLE VIII: U.S. COMPETITIVENESS

The Parties agree that a purpose of this CRADA is to provide substantial benefit to the U.S. economy.

A. In exchange for the benefits received under this CRADA, the Participant therefore agrees to the following:

(1) Products embodying Intellectual Property developed under this CRADA shall be substantially manufactured in the United States, and

(2) Processes, services, and improvements thereof which are covered by Intellectual Property developed under this CRADA shall be incorporated into the Participant's manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States. Such processes, services, and improvements, when implemented outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States.

B. The Contractor agrees to a U.S. Industrial Competitiveness clause in accordance with its prime contract with respect to any licensing and assignments of its Intellectual Property arising from this CRADA, except that any licensing or assignment of its intellectual property rights to the Participant shall be in accordance with the terms of paragraph A of this Article.

**ARTICLE IX: EXPORT CONTROL**

THE PARTIES UNDERSTAND THAT MATERIALS AND INFORMATION RESULTING FROM THE PERFORMANCE OF THIS CRADA MAY BE SUBJECT TO EXPORT CONTROL LAWS AND THAT EACH PARTY IS RESPONSIBLE FOR ITS OWN COMPLIANCE WITH SUCH LAWS. EXPORT LICENSES OR OTHER AUTHORIZATIONS FROM THE U.S. GOVERNMENT MAY BE REQUIRED FOR THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES UNDER THIS AGREEMENT. THE PARTIES ACKNOWLEDGE THAT EXPORT CONTROL REQUIREMENTS MAY CHANGE AND THAT THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES FROM THE U.S. WITHOUT AN EXPORT LICENSE OR OTHER APPROPRIATE GOVERNMENTAL AUTHORIZATION MAY RESULT IN CRIMINAL LIABILITY.

**ARTICLE X: REPORTS AND PUBLICATIONS**

A. The Parties agree to produce the following deliverables to DOE Office of Scientific and Technical Information (OSTI):

(1) an initial abstract suitable for public release at the time the CRADA is executed;

(2) a final report, upon completion or termination of this CRADA, to include a list of Subject Inventions; and

(3) other scientific and technical information in any format or medium that is produced as a result of this CRADA that is useful to the Government or the public as specified by and upon request from DOE no later than two (2) years from submission of the final report to OSTI.

The Parties acknowledge that the Contractor has the responsibility to timely provide the above information to OSTI. Furthermore, item (2) above should also be provided to the DOE field office.

B. The Parties anticipate that their employees may wish to publish technical developments and/or research findings generated in the course of this CRADA. On the other hand, the Parties recognize that an objective of this CRADA is to provide business advantages to the Participant. In order to reconcile publication and business concerns, the Parties agree to review proposed public disclosures as follows:

(1) Each Party ("Submitter") shall submit to the other Party ("Recipient"), in advance, proposed written and oral publications pertaining to work under the CRADA. Proposed oral publications shall be submitted to the Recipient in the form of a written presentation synopsis and a written abstract.

(2) The Recipient shall provide a written response to the Submitter within thirty (30) days, either objecting or not objecting to the proposed publication. The Submitter shall consider all objections of the Recipient and shall not unreasonably refuse to incorporate the suggestions and meet the objections of the Recipient. The proposed publication shall be deemed not objectionable, unless the proposed publication contains the Recipient's Proprietary Information, Protected CRADA Information, export controlled information for which the Submitter does not have an appropriate license or exclusion from U.S. export control laws, or material that would create potential statutory bars to filing the United States or corresponding foreign Patent applications. In the event an objection is raised because of a potential statutory bar, the Recipient shall file its patent application within sixty (60) days of making such objection, after which time the Submitter is free to publish.

C. The Parties agree that neither will use the name of the other Party or its employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this CRADA, without prior written approval of the other Party.

**ARTICLE XI: FORCE MAJEURE**

No failure or omission by the Contractor or the Participant in the performance of any obligation under this CRADA shall be deemed a breach of this CRADA or create any liability if the same shall arise from any cause or causes beyond the control of the Contractor or the Participant, including but not limited to the following, which, for the purpose of this CRADA, shall be regarded as beyond the control of the Party in question: Acts of God, acts or omissions of any government or agency thereof, compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof, fire, storm, flood, earthquake, accident, acts of the public enemy, war, rebellion, insurrection, riot, sabotage, invasion, quarantine, restriction, transportation embargoes, or failures or delays in transportation.

**ARTICLE XII: DISPUTES**

The Parties shall attempt to jointly resolve all disputes arising from this CRADA. In the event a dispute arises under this CRADA, the Participant is encouraged to contact Contractor's Technology Partnerships Ombudsman in order to further resolve such dispute before pursuing third-party mediation or other remedies. If the Parties are unable to jointly resolve a dispute within sixty (60) days, they agree to submit the

dispute to a third-party mediation process that is mutually agreed upon by the Parties. To the extent that there is no applicable U.S. Federal law, this CRADA and performance thereunder shall be governed by the laws of the State of Colorado, without reference to that state's conflict of laws provisions.

## ARTICLE XIII: ENTIRE CRADA, MODIFICATIONS, ADMINISTRATION AND TERMINATION

A. This CRADA with its appendices contains the entire agreement between the Parties with respect to the subject matter hereof, and all prior representations or agreements relating hereto have been merged into this document and are thus superseded in totality by this CRADA.

B. Any agreement to materially change any terms or conditions of this CRADA or the appendices shall be valid only if the change is made in writing, executed by the Parties hereto, and approved by DOE.

C. The Contractor enters into this CRADA under the authority of its prime contract with DOE. The Contractor is authorized to and will administer this CRADA in all respects unless otherwise specifically provided for herein. Administration of this CRADA may be transferred from the Contractor to DOE or its designee with notice of such transfer to the Participant, and the Contractor shall have no further responsibilities except for the confidentiality, use and/or nondisclosure obligations of this CRADA.

D. This CRADA may be terminated by either Party upon thirty (30) days written notice to the other Party.

   In the event of termination by either Party, each Party shall be responsible for its share of the costs incurred through the effective date of termination, as well as its share of the costs incurred after the effective date of termination, and which are related to the termination.

## ARTICLE XIV: BACKGROUND INTELLECTUAL PROPERTY

Each Party may use the other Party's Background Intellectual Property identified in an Appendix to this CRADA solely in performance of research under the Joint Work Statement. This CRADA does not grant to either Party any option, grant, or license to commercialize, or otherwise use the other 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 Background Intellectual Property may exist that is not identified. Neither Party shall be liable to the other Party because of failure to list Background Intellectual Property.

Approval:

**FOR CONTRACTOR:**

BY _____

NAME _____

TITLE _____

DATE _____

**FOR PARTICIPANT:**

BY _____

NAME _____

TITLE _____

DATE _____

**DOE APPROVAL FOR NREL TO ENTER INTO THE AGREEMENT**

BY _____

NAME _____

TITLE _____

DATE _____