I. Parties to the Technical Services Agreement.
The Alliance for Sustainable Energy, LLC as Management and Operating (M&O) Contractor for the National Renewable Energy Laboratory (“Contractor”), under U.S. Department of Energy Contract No. DE-AC36-08GO28308, has been requested by the “Sponsor” to perform the services set forth in the Scope of Work below.

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<tr>
<th>Sponsor</th>
<th>Contact name</th>
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<tbody>
<tr>
<td>Address</td>
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<table>
<thead>
<tr>
<th>NREL</th>
<th>National Renewable Energy Laboratory</th>
<th>Contact name</th>
</tr>
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<tbody>
<tr>
<td>Address</td>
<td>15013 Denver West Parkway</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Golden, CO 80401</td>
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<tr>
<td>Phone #</td>
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</table>

II. Scope of Work.
Pursuant to the Technical Services Agreement and subject to the attached terms and conditions, NREL will assign a duly authorized employee to perform the work agreed to as follows:

(a) Description of work:
Field of Use for potential license:

(b) Deliverables:
(c) Period of Performance; (not to exceed 36 months) X months
(e) NREL Cost Estimate
   DOE Administrative Charge (3%) $ 00,000.00
(f) TOTAL Cost Estimate (not to exceed $250,000) $ 00,000.00

(d) Cost basis: Labor hours and materials

III. Acceptance of Technical Services Agreement.
Research Center Director

Signature
<Name of Center Director>

Date

Sponsor Acceptance

Contractor Acceptance

Signature
Title: __________________________________________

Date

Signature
Title: William Farris, Associate Laboratory Director, Innovation, Partnering & Outreach

Date

CC: Contracting Officer, DOE Golden Field Office
Terms and Conditions for Technical Services Agreement

ARTICLE I. Scope of Technical Services. Subject to the following terms and conditions, NREL (herein also as “Contractor”) agrees to provide Technical Services to the Sponsor in the defined work areas identified in the Scope of Work attached and incorporated herein. It is understood by the Parties that, except for the intellectual property provisions of this Agreement, NREL is obligated to comply with the terms and conditions of the Department of Energy (DOE) M&O Contract when providing goods, services, products, processes, materials, or information to the Sponsor under this Agreement. The parties understand that DOE has authorized NREL to use this Technical Services Agreement when appropriate, and that the total cost to Sponsor will not exceed $250,000.

ARTICLE II. Term and Termination of Agreement. NREL’s estimated period of performance for completion of the Scope of Work is the term of this Agreement. The term shall be effective as the later date of (1) the date on which this Agreement is signed by the last of the Parties thereto, or (2) the date on which NREL receives advance payment from the Sponsor. This Agreement may be terminated, in whole or in any part, at any time by either Party, without liability, upon giving ten (10) days written notice to the other party. In the event of termination, the Sponsor shall be responsible for NREL’s costs (including closeout costs) through the effective date of termination, but in no event shall the Sponsor’s cost responsibility exceed the total cost to the Sponsor as described in the Scope of Work.

ARTICLE III. Costs. NREL has no obligation to continue or complete performance of the work at a cost in excess of its estimated cost. NREL agrees to provide at least thirty (30) days written notice to the Sponsor if the actual cost to complete performance will exceed NREL’s estimated cost.

ARTICLE IV. Funding and Payment. This Technical Services Agreement is based on full cost recovery, and NREL is required by the Government to receive advance funding before beginning work. For this Technical Services Agreement, Sponsor is required to provide 90 days advance funding for costs to be incurred in the performance of this Agreement and NREL shall have no obligation to perform work in the absence of advance funds. Upon termination or completion, any excess funds shall be refunded by NREL to the Sponsor. Sponsor shall enter this Agreement number on the check and mail payment to the following address:

National Renewable Energy Laboratory, 15013 Denver West Parkway, Golden, CO  80401
ATTN: Finance – Mailstop RSF041

ARTICLE V. Source of Funds. The Sponsor hereby warrants and represents that, if the funding it brings to this Technical Services Agreement has been secured through other agreements, such other agreements do not have any terms and conditions (including intellectual property) that conflict with the terms and conditions of this Technical Services Agreement.

ARTICLE VI. Prepublication Review. The Parties agree to secure prepublication approval from each other, which shall not be unreasonably withheld or denied beyond thirty (30) days.

ARTICLE VII. Legal Notice. Any technical paper, article publication, or announcement of advances generated in connection with work done under this Technical Services Agreement, during the period of performance of the Agreement or in the future, shall give credit to the Sponsor as a sponsor of the work and shall contain the following legal notice: "The National Renewable Energy Laboratory, 15013 Denver West Parkway, Golden, CO 80401 is a national laboratory of the U.S. Department of Energy managed by the Alliance for Sustainable Energy, LLC for the U.S. Department of Energy under Contract Number DE-AC36-08GO28308."

ARTICLE VIII. Disclaimer. THE GOVERNMENT AND CONTRACTOR MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITION OF THE TECHNICAL SERVICES; OR ANY INTELLECTUAL PROPERTY; OR PRODUCT MADE OR DEVELOPED UNDER THIS TECHNICAL SERVICES AGREEMENT; OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE TECHNICAL SERVICES OR RESULTING PRODUCT. THE GOVERNMENT OR CONTRACTOR WILL NOT BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES.

ARTICLE IX. General Indemnity. The Sponsor agrees to indemnify and hold harmless the Government, the Contractor, and persons acting on their behalf from all liability, including costs and expenses incurred, to any person, including the Sponsor, for injury to or death of persons or other living things or injury to or destruction of property arising out of the performance of the Agreement by the Government, the Contractor, or persons acting on their behalf, or arising out of the use of the services
performed, materials supplied, or information given hereunder by any person including the Sponsor, and not directly resulting
from the fault or negligence of the Government, the Contractor, or persons acting on their behalf.

**ARTICLE X. Product Liability Indemnity.** Except for any liability resulting from any negligent acts or omissions of the
Government or the Contractor, the Sponsor agrees to indemnify 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 Sponsor, its assignees, or licensees, which was derived from
the work performed under this Technical Services Agreement. In respect to this Article, neither the Government nor the
Contractor shall be considered assignees or licensees of the Sponsor, as a result of reserved Government and Contractor rights.
The indemnity set forth in this paragraph shall apply only if the Sponsor shall have been informed as soon and as completely as
practical by the Government and/or the Contractor 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
Government and/or Contractor shall have provided all reasonably available information and reasonable assistance requested by
the Sponsor. No settlement for which the Sponsor would be responsible shall be made without the Sponsor’s consent unless
required by final decree of a court of competent jurisdiction.

**ARTICLE XI. Notice and Assistance Regarding Patent and Copyright Infringement.** The Sponsor shall report to DOE
and NREL, promptly and in reasonable written detail, each claim of patent or copyright infringement based on the performance
of this Technical Services Agreement of which the Sponsor has knowledge. The Sponsor shall furnish to DOE and NREL,
when requested by DOE or NREL, all evidence and information in the possession of the Sponsor pertaining to such claim.

**ARTICLE XII. Patent Rights—Use of Facilities.**
The terms and conditions of this TSA are not intended to be used for research and development, software development, or
where there is a possibility of any intellectual property being conceived or created.

**ARTICLE XIII. Rights in Technical Data—Use of Facilities.** Subject to the provisions of this article, Sponsor shall have the
right to use, release to others, reproduce, distribute, or publish any data first produced under this TSA. Data produced under
this TSA will be provided to the Sponsor who will be solely responsible for marking the data and removing the data from the
facility by or before termination of this TSA. DOE and Contractor shall have the right to publish and use any data provided to
or generated by Contractor, and to permit others to do so unless such data is marked as "Proprietary Information" by the
Sponsor. The Government and Contractor agree not to disclose properly marked Proprietary Information to anyone other than
the Sponsor without written approval of the Sponsor, except to Government employees who are subject to the statutory
provisions against disclosure of confidential information set forth in the Trade Secrets Act (18 USC 1905). The Government
shall have unlimited rights in technical data (including Proprietary Information) that are not removed from the facility by or
before termination of this TSA. In addition, the Government and Contractor shall have the unlimited right to perform similar
or identical services for other Sponsors as long as the Sponsor's Proprietary Information is not utilized. Sponsor agrees to
deliver to persons acting on behalf of DOE a non-proprietary description of the work to be performed under this TSA.

**ARTICLE XIV. Assignment.** Neither this Technical Services Agreement nor any interest therein or claim thereunder shall be
assigned or transferred by either Party, except as authorized in writing by the other Party to this Technical Services Agreement,
provided, NREL may transfer it to DOE, or its designee, with notice of such transfer to the Sponsor, and NREL shall have no
further responsibilities except for the confidentiality, use, and/or nondisclosure obligations of this Technical Services
Agreement. The obligation of NREL shall apply to any successor in interests continuing the management and operation of the
DOE facility involved in this Technical Services Agreement.

**ARTICLE XV. Similar or Identical Services.** The Government and/or NREL shall have the right to perform similar or
identical services in the Statement of Work for other Sponsors as long as the Sponsor's Proprietary Information is not utilized.

**ARTICLE XVI. Non Competition.** The Sponsor states that, to the best of the Sponsor’s knowledge, NREL is not in
competition with the domestic private sector by performing these Technical Services.

**ARTICLE XVII. Export Control.** Each Party is responsible for its own compliance with laws and regulations.

**ARTICLE XVIII. Entire Agreement.** It is expressly understood and agreed that this Technical Services Agreement and its
attachments contain the entire Agreement between the parties. Any agreement to materially change any of the terms and
conditions of this Technical Services Agreement or the attachments shall be valid only if the changes are made in writing and
executed by the Parties herein.