

National Renewable Energy Laboratory (NREL)

Approved by Commission

2-28-02
Cheremie Marshall
City Clerk

*CC: NREL
BOC
Finance
City Mgr.*

Alliance for Sustainable Energy, LLC
manager and operator of the
National Renewable Energy Laboratory

Strategic Partnership Projects
Technical Services Agreement
No. TSA-22-22258-0

Notice: By signing this Agreement, the Sponsor acknowledges in advance that its entity name and the title and non-proprietary description of the project are available for public release by the Contractor without further notice.

I. Parties to the Technical Services Agreement.

Alliance for Sustainable Energy, LLC as Management and Operating (M&O) Contractor for the National Renewable Energy Laboratory ("Contractor" or "NREL"), 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.

Sponsor	Frankfort City Government	Contact name	Laura Hagg
Address	at 215 W. Second Street,	Phone #	502-875-8500
	Frankfort, KY 40601	Email	LHagg@frankfort.ky.gov

Contractor	Alliance for Sustainable Energy, LLC	Contact name	Katie Richardson
Address	15013 Denver West Parkway	Phone #	575-912-0622
	Golden, CO 80401	Email	katie.richardson@nrel.gov

II. Statement of Work.

Pursuant to the Technical Services Agreement and subject to the attached terms and conditions, Contractor will assign a duly authorized employee to perform the work agreed to as follows:

(a) Project Title: Technical Support for the City of Frankfort, Kentucky's 100% Renewable Energy Goals			
(b) Non-proprietary Description of Project: Provide technical support to the City of Frankfort KY to support its clean energy goals.			
(c) Statement of Work: See Appendix A-Statement of Work Field of Use for potential license: N/A			
(d) Deliverables: See Appendix A-Statement of Work			
(e) Period of Performance: (not to exceed 36 months)	12 months	(g) Contractor Cost Estimate	\$ 50,000.00
		DOE Administrative Charge (3%)	\$waived
(f) Cost basis: Labor hours and materials		(h) TOTAL Cost Estimate (not to exceed \$500,000)	\$ 50,000.00
		Advance payment:	\$30,000.00

III. Acceptance of Technical Services Agreement.

Sponsor Acceptance

M. Layne Wilkerson II 2/28/22
Signature _____ Date _____
Name: *m. Layne Wilkerson II*
Title: *mayor*

Contractor Acceptance

Signature _____ Date _____
Name: Anne Miller
Title: Director, Technology Transfer

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, Alliance for Sustainable Energy, LLC (herein also “Contractor” or “NREL”) 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, Contractor is obligated to comply with the terms and conditions of the Department of Energy (herein also “DOE” or “Government”) 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 the Contractor to use this Technical Services Agreement when appropriate and that the total cost to Sponsor will not exceed \$500,000.

ARTICLE II. Term and Termination of Agreement. The Contractor’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 the Contractor receives advance payment from the Sponsor and funds are allocated to this Agreement. 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 the Contractor’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. The Contractor has no obligation to continue or complete performance of the work at a cost in excess of its estimated cost. The Contractor agrees to provide at least thirty (30) days written notice to the Sponsor if the actual cost to complete performance will exceed Contractor’s estimated cost.

ARTICLE IV. Funding and Payment. This Technical Services Agreement is based on full cost recovery and the Contractor is required by the Government to receive advance funding before beginning work. The Sponsor shall provide sufficient funds in advance to reimburse the Contractor for costs to be incurred in performance of the work described in this Agreement, and the Contractor shall have no obligation to perform in the absence of adequate advance funds. If the estimated period of performance exceeds 90 days and the estimated cost exceeds \$25,000, the Sponsor may, with the Contractor’s approval, advance funds incrementally. In such a case, the Sponsor shall provide to the Contractor, prior to any work being performed, an advance payment sufficient to cover anticipated work that will be performed for the first billing cycle. In addition, the Sponsor shall provide additional funding to ensure that funds remain available for work during subsequent billing cycles (collectively the advance payment of \$30,000 as set forth in Block II (h) of the attached cover page for this Agreement). Following Sponsor’s remittance of the advance payment, the Contractor will invoice the Sponsor each billing cycle (or as necessary) to maintain a balance of funding sufficient to cover anticipated work. Sponsor’s payment shall be due no later than thirty (30) days after receipt of Contractor’s invoice. Upon termination or completion, any excess funds shall be refunded by the Contractor to the Sponsor.

Sponsor shall enter this Agreement number on the check made payable to the Alliance for Sustainable Energy, LLC and mail payment to the following address:

Alliance for Sustainable Energy, LLC
Manager of the National Renewable Energy Laboratory
ATTN: Finance – Mailstop RSF041
15013 Denver West Parkway, Golden, CO 80401

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. Tangible Personal Property. Upon termination of this Agreement, tangible personal property or equipment produced or acquired in conducting work under this Agreement shall be owned by the Sponsor. Tangible personal property or equipment produced or acquired as part of this Agreement will be accounted for and maintained during the term of the Agreement in the same manner as Department of Energy property or equipment. Costs incurred for disposition of property shall be the responsibility of the Sponsor and included in costs allocated in Article III or paid separately by the Sponsor.

ARTICLE VII. 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 VIII. 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 IX. 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 X. General Indemnity. To the extent permitted by Kentucky state law, 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 XI. Product Liability Indemnity. To the extent permitted by Kentucky state law, except for any liability resulting from any negligent acts or omissions of the Contractor or the Government, 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 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 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 XII. Notice and Assistance Regarding Patent and Copyright Infringement. The Sponsor shall report to the DOE and the Contractor, 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 the DOE and the Contractor, when requested by the DOE or the Contractor, all evidence and information in the possession of the Sponsor pertaining to such claim.

ARTICLE XIII. Patent Rights—Use of Facilities.

The terms and conditions of this Technical Services Agreement 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 XIV. 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 Agreement. Data produced under this Agreement 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 Agreement. The DOE and the 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 the 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 Agreement.. Sponsor agrees to deliver to persons acting on behalf of DOE a non-proprietary description of the work to be performed under this Agreement.

ARTICLE XV. 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, the Contractor may transfer it to DOE, or its designee, with notice of such transfer to the Sponsor, and the Contractor shall have no further responsibilities except for the confidentiality, use, and/or nondisclosure obligations of this Technical Services Agreement. The obligation of the Contractor shall apply to any successor in interests continuing the management and operation of the DOE facility involved in this Technical Services Agreement.

ARTICLE XVI. Similar or Identical Services. The Government and/or the Contractor 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 XVII. Non Competition. The Sponsor states that, to the best of the Sponsor's knowledge, the Contractor is not in competition with the domestic private sector by performing these Technical Services.

ARTICLE XVIII. Export Control. Each Party is responsible for its own compliance with laws and regulations governing export control.

ARTICLE XIX. 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.

Alliance for Sustainable Energy, LLC
manager and operator of the
National Renewable Energy Laboratory

Strategic Partnership Projects
Technical Services Agreement—TSA-22-22258-0

Appendix A – Statement of Work

Prepared by the National Renewable Energy Laboratory
2/20/2022

I. Project Title:

Technical Support for the City of Frankfort, Kentucky's 100% Renewable Energy Goals

II. Background:

Parties to this agreement are:

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.

Sponsor: City of Frankfort Kentucky (City) a municipality, is located at 215 W. Second Street, Frankfort, KY 40601

The Board of Commissioners of the City of Frankfort, KY adopted a 100% clean renewable energy resolution in late 2021. This resolution set goals for Frankfort to reach 100% clean renewable electricity use for City operations by 2023, 100% clean renewable energy use for City operations by 2030 and 100% clean renewable electricity community-wide by 2030. As part of its planning to meet these goals, the City has requested technical assistance and analytic support for options and pathways of meeting this goal from NREL. The City is considered the client and point of contact for NREL's work.

III. Scope of Work - Task Descriptions, Deliverables, and Estimated Completion Dates:

Phase I represents a planned, broader effort for NREL to support the City in mapping out potential pathways to meeting its clean energy goals. Current funding is only provided for the Phase 1 activities described below. Any additional effort envisioned under this Agreement is dependent upon additional funding and the development of a detailed Statement of Work (SOW) for future efforts.

NREL will provide staff and technical expertise, including data collection and formatting, modeling and analysis and project management to support the City with three primary activities under this scope of work:

Phase 1 Effort

- **Task 1: Baseline and Solution Mapping** – Compile data on the City’s municipal operations baseline energy usage, costs, building stock inventory, retail tariff structures and other relevant information that might inform future decisions, and thereafter, provide a high-level mapping of a broader strategy to meet the City’s 2023 and 2030 renewable energy goals. The City will be responsible for providing NREL with municipal energy related data, and NREL’s work is contingent upon receiving such data.
- **Task 2: Development of Pathways to 100% Clean Renewable Electricity** – Based on outputs of Task 1 and in collaboration with City staff, present a PowerPoint and narrative report that analyzes the costs and benefits of various pathways to 100% renewable electricity for City operations.
- **Task 3: Community Clean Energy Analysis Using SLOPE and LEAD** - NREL will utilize the NREL- and Department of Energy-developed [State and Local Planning for Energy \(SLOPE\)](#) and [Low-Income Energy Affordability Data Tool \(LEAD\)](#) tools to create customized analyses for Frankfort, using the modeled data sets included in these tools.

Task 1. Compile Baseline Data and Solution Mapping

Under this task, NREL will work directly with City staff to compile baseline energy usage, cost, retail tariff structures, building and fleet inventory, franchise information, regulatory barriers/opportunities, internal goals and policies and other relevant materials. Thereafter, NREL will develop a high level “menu” of components of a broader clean electricity strategy. Sub-tasks include:

1. Conduct initial interviews with City of Frankfort and Frankfort Plant Board staff to understand data availability and discuss overall data needs
2. Assemble energy data request and work with City staff to collect such data
3. Collate all relevant energy data provided by City staff
4. Conduct interviews with various governmental and non-governmental stakeholders, as informed by data, to uncover potential components of City operations and City-wide clean electricity strategy (e.g., procurement of renewable energy, community, and behind-the-meter solar, energy efficiency and demand management options, market participation options, and other related options, etc.)
5. Present all information and initial findings to the Board of Commissioners and City staff.

Deliverable: NREL will develop a slide deck to present findings of Task 1. Estimated Completion Date - Month 4

Task 2. Development of Pathways to 100% Clean Renewable Electricity

Under this task, NREL will lead a process in collaboration with City staff to develop a project plan for an expanded analysis of potential energy pathways for City operations by 2023 and 2030. While the exact details of Task 2 are to be determined in consultation with City staff and stakeholders, Task 2 will examine the range of high-level costs, benefits and practical/implementation-related considerations of various energy pathways for Frankfort, helping to provide an analytical approach for future energy decisions. This task will focus on defining the exact analytical tools, data sets, and modelling approaches that must be brought to bear to better understand energy options for the City.

Deliverable: Documentation of data collected and brief narrative report (approximately 5 pages) that describes pathways to achieve clean renewable energy goals. Estimated Completion Date - Month 8

Task 3. Community Clean Energy Analysis Using SLOPE and LEAD

NREL will utilize the NREL- and Department of Energy-developed SLOPE and LEAD tools to create customized analyses for the City, using the modeled data sets included in these tools.

The purpose of this initial effort is to help the City with initial analysis and develop a preliminary understanding of community-wide energy usage and questions such as:

- How does energy use and energy savings potential vary across sectors (residential, commercial, industrial, transportation, generation)?
- What are the opportunities to target clean energy and efficiency programs and/or policies to benefit low- and moderate-income residents?
- How much energy could be generated from various renewable energy technologies and how does that compare to electricity consumption under business as usual and high electrification scenarios?
- Which communities in Frankfort face the highest energy burdens, at a census tract level?

Deliverable: A PowerPoint presentation detailing results of the Task 3 analysis and next steps for the community. The results of all three tasks will be presented virtually to the Board of Commissioners and if desired by the City, at a public meeting. Estimated Completion Date - Month 8

Optional Phase 2

Potential activities under Phase 2 may be developed to help implement the efforts outlined and developed under Task 2 above. Any activities to be conducted under Phase 2 are contingent upon developing a mutually agreed upon scope and budget for such activities.

IV. Schedule:

The estimated period of performance for this Agreement is 12 months.

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Strategic Partnership Project
Technical Services Agreement
No. TSA-22-22258-0

Appendix B – Background Intellectual Property
Patents, Patent Applications, and Record of Inventions

Title: Technical Support for the City of Frankfort, Kentucky's 100% Renewable Energy Goals

Contractor and Sponsor have identified and agreed that the following Background Intellectual Property may be used in the performance of work under this Technical Services Agreement and may be needed to practice the results of this Technical Services Agreement.

Contractor:

NREL SWR No. SWR-12-06, OpenCarto Framework (State and Local Planning for Energy (SLOPE))
NREL SWR No. SWR-xx-xx, Low-Income Energy Affordability Data Tool (LEAD)

"NREL Protected Information" means information, including technical data, computer software, drawings, photographs, process information, samples, equipment, specifications, microorganisms and the like, contained in, or covered by, any above listed unpublished NREL patent applications, Innovation Reports and ROIs, which is marked as NREL Protected Information and is protectable under 35 U.S.C. § 205. The Sponsor agrees to treat NREL Protected Information in the same manner as Proprietary Information including keeping the information as confidential and to use NREL Protected Information only at the Sponsor's organization in connection with the performance of the Joint Work Statement.

Upon termination of this Agreement, the Sponsor agrees to promptly discontinue its use of the above listed NREL Protected Information, and will, at the Contractor's request, return or destroy all remaining NREL Protected Information. In the event the Contractor terminates this Agreement pursuant to Article XIII of the Technical Services Agreement herein, the Sponsor's right to NREL Protected Information listed in this Appendix B will automatically terminate.

Sponsor:

None Expected