



# GUIDE FOR THE SUBMISSION OF Unsolicited Proposals



April 3, 2017

U.S. DEPARTMENT OF NATIONAL ENERGY TECHNOLOGY LABORATORY The National Energy Technology Laboratory (NETL), Pittsburgh Office has operational responsibility of the DOE Unsolicited Proposal (USP) Program. All unsolicited proposals should be forwarded by Email to John N. Augustine at <u>DOEUSP@NETL.DOE.GOV</u> who will serve as the single point of contact for all Department of Energy (DOE) unsolicited proposals. Please direct all unsolicited proposals, abstracts and correspondence to:

John N. Augustine, Mail Stop 921-107 Unsolicited Proposal Manager U.S. Department of Energy National Energy Technology Laboratory 626 Cochrans Mill Road P.O. Box 10940 Pittsburgh, PA 15236-0940 Email: DOEUSP@NETL.DOE.GOV

## **TABLE OF CONTENTS**

## <u>Page</u>

Introduction	3
Part 1 — Submitting an Unsolicited Proposal	5
Part 2 — Review and Evaluation	13
Part 3 — Research Areas	15
Appendix A — Unsolicited Proposal Cover Page	24

## **INTRODUCTION**

The U.S. Department of Energy (DOE) looks to the private sector to assist in the accomplishment of its mission (www.doe.gov/about/index.htm) and program objectives. Organizations and individuals are encouraged to submit proposals which are relevant to the DOE's research and development mission either in response to formal DOE solicitations and opportunity announcements or through self-generated unsolicited proposals.

In the solicited area, program sponsors issue competitive announcements and solicitations to involve the public in a basic or applied research and development project. Additionally, broad competitive announcements/solicitations that may cover multiple projects are also issued by program offices. The predominance of DOE's funding for research and development is awarded through competitive financial assistance funding opportunity announcements (FOA)

The Department of Energy (DOE) makes awards as a result of competitive announcements and solicitations. An unsolicited proposal (which would fall under a noncompetitive process) may be considered if it represents a unique or innovative idea that would not otherwise be eligible under a known agency competitive announcement. You can access DOE grant opportunities at; <a href="http://www.grants.gov/search/search.do">http://www.grants.gov/search/search.do</a>; <a href="http://www.grants.gov/search.do">http://www.grants.gov/search.do</a>; <a href="http://www.grants.gov/search.do">http://www.grants.gov/search.gov/search.do</a>; <a href="http://www.grants.gov/search.do">http://www.grants.gov/search.gov/search.gov/search.gov/search.gov/search

All organizations/individuals that want to do business with the Dept. of Energy must obtain a DUNS number. DUNS website: <u>http://fedgov.dnb.com/webform</u>.

In addition, you must register with the SAM. The SAM website: <u>http://www.sam.gov/</u>. If you had an active registration in CCR, you should have an active registration in SAM.

The website at <u>www.grants.gov</u> is used to find and apply for financial assistance opportunities, but registration is required in CCR and FedConnect (<u>https://www.fedconnect.net/FedConnect/Default.htm</u>) to apply.

The General Services Administration provides access to the Catalog of Federal Domestic Assistance (CFDA), which is a government-wide compendium of Federal programs, projects, services, and activities that provide assistance or benefits to the American public. The website contains financial and non-financial Federal assistance programs. If you would like to identify future opportunity announcements and register to obtain grant e-mail notifications of those that may interest you, go to www.grants.gov. After clicking on 'Find Grant Opportunity,' you may apply for notifications under 'e-mail subscriptions'; then click on 'Notices Based on Advanced Criteria' to subscribe for specific areas that interest you. You will have to insert a Catalog of Federal Domestic Assistance (CFDA) number on this page. The General Services Administration provides access to the CFDA, which is a government-wide compendium of Federal programs, projects, services, and activities that provide assistance or benefits to the American public. The website contains financial and non-financial Federal assistance programs. The CFDA website is located at www.cfda.gov , under "Search" (right side of screen); click "Find Programs by Agency". The Dept. of Energy CFDA numbers can be located at

https://cfda.symplicity.com/?s=agency&mode=form&tab=program&id=f9b483c381bd2a656b43c ec368f9438f. Once there, you will be able to access the majority of DOE's financial assistance programs that fall within Science and Technology and Other Research & Development.

The unsolicited proposal is another method used by the DOE to fund research and development. An "Unsolicited Proposal" is an application for support of an idea, method, or approach which is submitted by individuals, businesses, and organizations solely on the proposer's initiative, and not in response to a "formal" Government solicitation or announcement. Funding of unsolicited proposals is considered a noncompetitive action and DOE is under no obligation to fund a meritorious unsolicited proposal due to funding limitations or other program priorities.

There are a number of applicable regulations relating to criteria governing acceptance and funding of an unsolicited proposal, principally, they are:

- Title 48 Code of Federal Regulations (CFR), Chapter 1, the Federal Acquisition Regulation (FAR) Subpart 15.6 Unsolicited Proposals;
- Title 48 CFR, Chapter 9, the Department of Energy Acquisition Regulation (DEAR) Subpart 915.6 Unsolicited Proposals; and
- Title 10 CFR, Part 600.6 Financial Assistance Rules.

This guide is directed towards helping those prospective individuals, businesses, or organizations interested in submitting unsolicited proposals. It offers an overview of the unsolicited proposal process and describes the policies and procedures for the preparation and submission of an unsolicited proposal document to the DOE.

## PART 1 — SUBMITTING AN UNSOLICITED PROPOSAL

The DOE encourages the submission of unsolicited proposals that will contribute to its mission objectives. DOE considers proposals in all areas of energy and energy-related research and development with emphasis on long-term, high-risk, high-payoff technologies.

An unsolicited proposal may be accepted by DOE if it:

- Demonstrates a unique and innovative concept, or demonstrates a unique capability of the submitter;
- Offers a concept or services not otherwise available to the Government;
- Does not resemble the substance of a recent, current or pending competitive solicitation/announcement; and,
- Is independently originated by the proposer without Government supervision.
- Must be limited to 25 pages not including appendices.

The unsolicited proposal is the document intended to persuade the staff of the DOE and other qualified members of the scientific and engineering community who review and advise on the proposed work, that the project represents a worthwhile approach to the investigation of an important, timely problem. Each proposal should be self-contained and written with clarity and thoroughness.

In the unsolicited proposal, the proposer must present objectives and the pertinence of the proposed work to DOE, the rationale of the approach, the methods to be pursued, the qualifications of the investigators and the institution, if applicable, and the level of funding required to attain the objectives.

Part 3 of this guide lists the various DOE program offices, with a brief description of each and contact point. Further insight into general areas of current and anticipated research needs can be gained by following the progress of related work at the websites identified under each of the DOE programs in Part 3.

## Who May Submit

DOE will consider unsolicited proposals submitted by any individual or organization. This guide is prepared for the benefit of all prospective proposers including individuals, commercial firms, non-profit research organizations, and educational institutions. These guidelines are designed as general instructions/information. If the format is not suitable for a particular proposal, it should be modified as may be appropriate under the circumstances.

## <u>Submission</u>

DOE is not responsible for costs incurred in the preparation of proposals. The proposer may inquire informally via an abstract submission regarding the possible interest of DOE in the research and development area involved prior to the formal submittal of a proposal. This approach will determine if the work proposed is sufficiently related to the current DOE mission goals to warrant a formal submission, the level of funding support currently being expended in that field, and whether DOE has any programmatic interest in the type of work being proposed. In order to determine whether your technology has any relevance to DOE's program objectives and fits any current or planned competitive DOE announcements/solicitations, you may submit, by e-mail (preferred) or in writing, a structured/detailed technical abstract/summary of at least 500 words. The abstract should briefly describe your technology. *If your abstract does not include the (3) criteria below, it will be returned for re-submittal.* 

Abstract Sample format: (3 separate paragraphs)

- 1. What you propose to do and how (summary of at least 500 words)
- 2. Why it is beneficial to DOE
- 3. How the technology meets DOE's mission (<u>www.doe.gov/about/index.htm</u>).

This approach will allow us to locate the appropriate DOE office that has programmatic responsibility for a particular area of research. Once we have identified the cognizant program area within DOE, we will forward your abstract to that program area for review to determine programmatic interest and whether or not it would fit under any of DOE's competitive announcements/solicitations.

If you have already prepared or would prefer to generate and submit a full unsolicited proposal (**In accordance with page 4, Part 1**), you may submit it to our attention. However, you have the option to submit a technical abstract following the above guidelines to determine potential interest.

## Abstract submissions must be sent via e-mail to DOEUSP@NETL.DOE.GOV.

The option to submit an abstract or a full proposal does not imply the potential of DOE funding for a research idea. It merely serves to assist DOE in determining if there is any interest in an idea, concept or technology from our perspective.

## When to Submit

There are no specific dates for the submission of unsolicited proposals. However, because a comprehensive review is required before a proposal can be acted upon; new proposals should be submitted as early as possible, usually six months in advance of the desired beginning of support. Receipt of proposals will be acknowledged and the proposer will be notified when a decision is made on the proposal. If a proposer wishes to have a proposal withdrawn from consideration, he/she should promptly notify DOE in writing.

It is the policy of DOE to evaluate each proposal fairly and objectively, and to process proposals expeditiously and, where practicable, to keep proposers advised as decisions are made.

## Where to Submit

The office below is the central point for the receipt, distribution, and tracking of DOE unsolicited proposals. Full proposals received are acknowledged and assigned a DOE-USP identification (tracking) number. The number appears in the acknowledgment letter and should be referenced in all subsequent communications pertaining to the proposal. Abstracts are not assigned an identification number until it is warranted that a full proposal should be submitted. Your submission should be sent to:

## John Augustine

Unsolicited Proposal Manager

U.S. Department of Energy National Energy Technology Laboratory 626 Cochrans Mill Road P.O. Box 10940, MS 921-107 Pittsburgh, PA 15236-0940 DOEUSP@NETL.DOE.GOV A proposal may be a potential candidate for support by more than one DOE program office. The cognizant receiving office is familiar with the DOE areas of interest and tries to ensure that each research proposal is sent to the potentially interested program offices.

## What to Submit

The unsolicited proposal forms the basis for further technical evaluation and potentially a contract or grant award. There is not a particular format to follow for the submission of unsolicited proposals but **we prefer submission via Email**. All unsolicited proposals should cover the points discussed in this guide. If you must submit in writing, please submit one unbound copy of the proposal. Unsolicited proposals should be signed by an authorized official of the proposing organization or by the proposer if submitted by an individual.

Elaborate proposals or presentations are not desired. Each applicant should review the submission to ensure that all data necessary for critical evaluation is included initially. Correspondence generated by omission of essential items delays processing of proposals. The following is a list of essential items that an unsolicited proposal should contain.

## <u>Cover Page</u>

A sample cover page format has been included in Appendix A.

## **Basic Information**

- 1. Name and address of submitter.
- 2. Proposal submission date.
- 3. Type of business (indicate whether profit, nonprofit, educational, small business, womanowned, socially and economically disadvantaged, or other).
- 4. Proposed starting date and estimated period of performance.
- 5. Period for which proposal is valid (minimum of six months from date of submission).
- 6. Names and telephone numbers of the proposer's primary business and technical personnel whom DOE may contact for evaluation or negotiation purposes.
- 7. Signature of person authorized to contractually represent the individual or organization.
- 8. List of other Federal, State, or local government agencies or private organizations to which the proposal has been submitted and/or those funding the proposed effort.
- 9. Statement that the proposal may, or may not, be subjected to external review. (See "Limited Use of Data.")
- 10. Statement that the proposal does/does not contain proprietary information.

If you choose to include proprietary information in your proposal, the title page <u>must</u> be marked with the following legend:

## "USE AND DISCLOSURE OF DATA"

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole or in part-for any purpose other than to evaluate this proposal. However, if a contract is awarded to this offeror as a result of-or in connection with-the submission of these data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in these data if they are obtained from another source without restriction. The data subject to this restriction are contained in *[insert page numbers]*.

The proposer must also mark <u>each page</u> of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this page is subject to the restriction on the title page of this proposal.

Any unsolicited proposal marked with a legend different from that provided above will be returned to the offeror and the proposal cannot be considered because it is impracticable for the Government to comply with the legend. The proposal will be considered if it is resubmitted with the proper legend.

## **Business and Financial Information**

- 1. A cost estimate for the proposed effort sufficiently detailed by element of cost to permit a meaningful evaluation (where a cost-sharing arrangement is proposed, the proposer's share should be separately identified and similarly detailed);
- 2. A descriptive brochure if available of the proposer's organization, if applicable; and
- 3. A brief description of the proposer's facilities.

## **Technical Information**

- 1. A concise title and about a 500-word abstract of the proposed research. The abstract should be informative to other re-searchers in the same field, but in language that can be understood by an intelligent layman. It should be kept in mind that the abstract is the reviewer's introduction to the proposed research.
- 2. The body of the proposal should contain a statement of the work plan with sufficient technical detail to permit a meaningful evaluation: the phase-by-phase procedures to be followed; the objectives and expected significance; the method of approach and extent of the effort employed; the nature and extent of the anticipated results; the manner in which the work will help to support accomplishment of the DOE's mission (www.doe.gov/about/index.htm); the relation of the study both to the present state of knowledge in the field and to comparable work in progress elsewhere; and, a bibliography of

pertinent literature. Particularly important are references authored by the proposer. The general plan of approach should be out lined. Experimental methods and procedures should be adequately described. Appraisal of the scientific merit of the proposed research will be influenced in large measure by this presentation. It is understood that carefully detailed plans may require modification during the course of the research.

- 3. Available facilities and major items of equipment especially adapted or suited to the proposed research should be described. If all or any part of the project is to be performed away from the proposer's facility, this should be explained in full.
- 4. Names of key project personnel including the principal investigator or project leader along with brief biographical in-formation on each, clearly showing the investigator's experience and expertise in the technical area(s) of the proposal.

## Limited Use of Proposal Data

It is the policy of DOE that all Government and non-Government personnel handling unsolicited proposals shall exercise extreme care to ensure that the proposal information is not duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the proposal, without written permission of the offeror.

In some instances the proposal may be subject to evaluation by Government personnel outside the Department and/or by leading scientists or preeminent experts outside the Government.

In such instances a written agreement will be obtained from any non-Government evaluator that the evaluator will not disclose information in the proposal outside the Government.

If a proposal under consideration expressly states that only Government evaluation is authorized and DOE believes that evaluation outside the Government is necessary to determine the technical merit of the proposal, the proposer may be advised that DOE will be unable to give full consideration to the proposal unless the proposer consents in writing to having the proposal evaluated outside the Government.

If a proposal contains proprietary data, it shall be marked in accordance with the procedure in the FAR 15.609 or 10 CFR 600.15. These regulations provide specific coverage and language to be included in a proposal to identify those parts of the proposal which are proprietary.

## **Classified Research and Security Considerations**

Most solicitations of proposals for DOE projects are unclassified (i.e., in terms of national security). Unsolicited proposals are expected to be unclassified. If it is not feasible to submit an unclassified proposal and classified data or information is to be included or used, the proposal must be classified in accordance with its content. Additionally, if during the evaluation of an unsolicited proposal it is found that the work will involve a classified topic, any resulting business arrangement will take this into account and the proposer will be required to comply with applicable Government security regulations. Appropriate classification guidance will be furnished.

Guidance with regard to the preparation, handling, submission and disposition of a classified proposal may be obtained from contacting the DOE Unsolicited Proposal Office found on page 1 of this guide.

## Patents, Data, and Copyrights

Small business and nonprofit organizations generally have the right to elect to retain title to inventions they make in the performance of DOE funding agreements (grants, contracts, and cooperative agreements) for experimental, developmental, or research work unless DOE determines that exceptional circumstances require a different disposition of rights. (Public Law 96-517, amended by Public Law 98-620.)

Organizations which are not small business or nonprofit organizations are subject to DOE's statutory patent policy under Section 152 of the Atomic Energy Act of 1954, as amended and Section 9 of the Federal Non-nuclear Energy Research and Development Act of 1974. Under this policy, title to inventions conceived or first actually reduced to practice in the course of or under a contract, grant, or cooperative agreement with DOE vests in the Government, and the contractor receives a royalty free, nonexclusive, revocable license for use of such inventions. The contractor or grantee may request greater rights to inventions under the DOE's waiver procedures; such requests are governed by DOE's waiver procedures set forth in 10 CFR 784. Proposers intending to make such requests should submit them to the contracting officer as soon as possible prior to award or within thirty days thereafter.

Policies governing patents under contracts are contained in 48 CFR 927.3 and in 10 CFR 600.27 for financial assistance actions.

To preserve existing rights it is suggested that those who believe that they have patentable inventions should file, as a protection to themselves and to the Government, necessary patent applications with the U.S. Patent and Trademark Office.

The DOE will obtain unlimited rights in technical data and copyrighted material submitted in an unsolicited proposal if it is subsequently selected for award of a contract or grant. Unlimited rights apply to technical data and copyrighted material contained in the proposal unless the proposer marks those portions which it asserts are "proprietary data," or specifies those portions which are not directly related to or utilized in the contract work. Policies governing technical data and copyrights are detailed in 48 CFR 927.4.

## Reports

Offerors submitting unsolicited proposals should be aware that if selected for funding, a number of reporting requirements will be required. A schedule of reports will be arranged at time of award.

The selection of appropriate reports, their frequency and the amount of detail required will vary based on factors such as the program objectives, amount of funding, and type of instrument awarded. DOE program managers have been instructed to use discretion in report selection in order to keep administrative burdens to a minimum. Usually, an annual progress report is sufficient for fundamental research. Applied research and development will vary as just described. In any event, a final report will be required.

#### Acquisition and Assistance Awards

An unsolicited proposal may, if accepted, result in an acquisition (contract) or an assistance (grant or cooperative agreement) award. A contract is used when the principal purpose is the acquisition of an item or service for the direct benefit or use of the Federal Government. A grant would be awarded when no substantial involvement is expected between DOE and the recipient during performance of the contract, while a cooperative agreement would be used when substantial involvement between the DOE and the recipient is expected. The decision to award an acquisition or assistance instrument will be made by the program office funding the effort.

## Cost Sharing or Cost Participation

The decision as to whether an acquisition or assistance agreement will include either a cost-sharing or cost-participation provision, respectively, is made on a case-by-case basis. Normally, DOE will fully fund the early phases of basic research and development programs. However, subsequent phases of those programs, which provide the performer with present or future economic benefits through commercialization, will require some form of cost-sharing or cost participation.

Accounting System Requirements: Should your proposal be selected for negotiation toward award, you must have an accounting system that meets government standards for recording and collecting costs. If you have not had prior government awards, a government audit may be requested to verify that the accounting system is acceptable. The award may contain an article that prohibits reimbursement until the system is deemed acceptable.

## PART 2 — REVIEW AND EVALUATION

## **Initial Review**

Before a detailed evaluation of an unsolicited proposal will be undertaken, it will be initially reviewed to determine if the proposal contains sufficient technical and cost information, has been approved by a representative authorized to contractually obligate the proposer, and properly complies with any data disclosure restrictions.

If the document contains most of the information required, the proposal will be processed and any missing information may be requested by the program office from the proposer so that it may be reviewed and evaluated as an unsolicited proposal.

## **Evaluation**

The DOE is not required to perform comprehensive evaluations of unsolicited proposals not related to its mission.

The principal elements considered in evaluating a proposal are:

1. Unique and innovative methods, approaches, or concepts demonstrated by the proposal;

- 2. Overall scientific/technical or socioeconomic merit of the proposed activity;
- 3. Potential contribution of the effort to the DOE's specific mission;
- 4. The proposer's capabilities, related experience, facilities, techniques, or unique combinations of these which are integral factors for achieving the proposal objectives;
- 5. The qualifications, capabilities, and experience of the proposed principal investigator, team leader, or key personnel who are critical in achieving the proposal objectives;
- 6. The realism of the proposed costs;
- 7. The availability of funding to support the proposed project and the relative merit of the project to others which could be supported with the same funds.

Unsolicited proposals may be accepted upon a determination by the responsible official or designee, that support (award of a contract/grant or other arrangement as authorized by law) to the proposer is justified because the proposal was submitted on the proposer's own initiative; and the purpose is to explore a method, approach, or an idea or to carry out an initial development in support of DOE's mission which (a) demonstrates a unique and innovative concept, or, demonstrates a unique capability of the proposer to provide the particular research sciences proposed; (b) offers a concept or services not otherwise available to the government; and (c) does not duplicate or resemble the substance of a pending competitive acquisition [FAR 6.302-l(a)(2)(i)].

A favorable comprehensive evaluation of an unsolicited proposal is not, in itself, sufficient justification for executing a noncompetitive award with the offeror. When a document qualifies as an unsolicited proposal, but the substance (a) is available to the Government without restriction from another source, or (b) closely resembles that of a pending competitive solicitation, or (c) does not demonstrate an innovative and unique method, approach or concept, the unsolicited proposal shall not be accepted [FAR 15.607 (a)].

DOE has no obligation to make an award even if the technical evaluation is favorable, since other program priorities or funding limitations may preclude such action.

The proposer will be notified if it is decided that the proposal will not be supported. Copies of unsolicited proposals which have been declined will not normally be returned except on the written request of the principals involved.

If, on the other hand, the decision is made to support the proposal, the proposer will be advised and may be asked to submit additional details, revised budgets, or simply a confirmation of the proposal goals. Plans for getting the project underway may be firmed up at this time, but no real commitment of funds may be made until a formal notification action is completed.

A proposer may propose activities that are also of interest to other agencies. Interagency proposal evaluation may be initiated with the prior written approval of the proposer. If found acceptable, an agency may write a separate contract/grant or jointly fund the program with another agency having a collateral interest.

## PART 3 — RESEARCH AREAS

## Program Offices

The various DOE program divisions and staff offices that consider unsolicited proposals and their respective areas of responsibility are discussed below.

#### **Electricity Delivery and Energy Reliability**

The mission of the Office of Electricity Delivery and Energy Reliability (OE) is to drive grid modernization and resiliency in the energy infrastructure. OE leads the Department of Energy's efforts to ensure a resilient, reliable, and flexible electricity system. OE accomplishes this mission through research, partnerships, facilitation, modeling and analytics, and emergency preparedness.

OE recognizes that our Nation's sustained economic prosperity, quality of life, and global competitiveness depend on access to an abundance of secure, reliable, and affordable energy resources. Through a mix of technology and policy solutions, we will address the changing dynamics and uncertainties in which the electric system will operate. We will leverage effective partnerships, solid research, and best practices to address diverse interests in achieving economic, societal, and environmental objectives.

More details about our Office and its various programs can be found on our home page: <u>http://energy.gov/oe/office-electricity-delivery-and-energy-reliability</u>

## Contact

Email: <u>OEwebmaster@hq.doe.gov</u>

## Office of Science (SC)

The Office of Science publishes an annual Funding Opportunity Announcement permitting applications within its mission space. The annual notice, along with an array of topical announcements, are published at <u>www.Grants.gov</u> and made available through FedConnect at <u>https://www.fedconnect.net/FedConnect/Default.htm</u> and the Office of Science website at <u>http://science.energy.gov/grants/foas/open/</u>. All applications should be submitted through <u>www.Grants.gov</u> using the forms and instructions provided with each announcement. The Office of Science always has an announcement available under which applications may be submitted. Information about the Office of Science is available at <u>http://science.energy.gov</u>.

Contact: Office of Science Office of Grants and Contracts Support, SC-43 U.S. Department of Energy 19901 Germantown Road Germantown, MD 20874-1290 Email: SC.Grantsandcontracts@science.doe.gov

## Energy Efficiency and Renewable Energy (EE)

The mission of the Office of Energy Efficiency and Renewable Energy (EERE) is to develop cost competitive clean energy technologies and practices and facilitate their commercialization and deployment in the marketplace to strengthen America's energy security, environmental quality, and economic vitality. EERE achieves their mission through a strong and balance of research, development, and market development through private sector partnerships. EERE is organized around 10 energy programs:



- Biomass Program
- Building Technologies Program
- Federal Energy Management Program
- Vehicle Technologies Program
- Geothermal Technologies Program
- Fuel Cell Technologies Program
- Industrial Technologies Program
- Solar Energy Technology Program
- Wind & Water Power Technologies Program
- Weatherization & Intergovernmental Program

For information on the different Energy Programs within the Office of Energy Efficiency and Renewable Energy, visit their homepage at: www.eere.doe.gov.

## Contact:

Unsolicited Proposal Coordinator Mariah White Email: <u>Marriah.white@ee.doe.gov</u>

## Fossil Energy

With headquarters in downtown Washington, DC and Germantown, Maryland, the Department of Energy's Office of Fossil Energy (FE) maintains a technology development and commercialization capability that includes more than 1,000 scientists, engineers, technicians, and administrative staff. FE relies on the National Energy Technology Laboratory (NETL)— DOE's only national laboratory focused solely on fossil energy research—to complete high-priority technology development initiatives that meet DOE's energy goals. NETL has research and development



Tampa Electric Integrated Gasification Combined Cycle Plant

(R&D) campuses in Morgantown, West Virginia; Pittsburgh, Pennsylvania; and Albany, Oregon; and operations offices in Sugar Land, Texas and Fairbanks, Alaska.

One FE initiative, the Clean Coal Technology Demonstration Program (CCTDP), has been instrumental in developing and demonstrating a new generation of energy processes to significantly reduce emissions and other pollutants from coal-burning power plants. The CCTDP, a government-industry partnership that began in 1985, completed 33 projects at a cost of \$3.3B (DOE contribution of \$1.3B) with more than 20 new technologies achieving commercial success.

Following the CCTDP in 2001 was the Power Plant Improvement Initiative (PPII). PPII was initiated by Congress, through the DOE. Four projects were successfully completed and one project was discontinued, at a cost of \$71M (DOE contribution of \$30M). Finally, the Clean Coal Power Initiative (CCPI) was initiated in 2002 to advance a broad spectrum of promising technologies that target the most pressing environmental, economic, and energy security challenges. Thus far, three solicitations have been issued (CCPI-1, CCPI-2, and CCPI-3). Four projects were successfully completed and four projects are currently active, at a cost of \$4.7B (DOE contribution of \$1B).

NETL's current portfolio of advanced energy R&D includes over 500 projects designed to identify and mature emerging technologies for fossil energy applications ranging from high-temperature multi-fuel combustion turbines to innovative processes for utilizing high value by-products. In addition to its R&D portfolio, NETL provides nationally recognized energy analysis capabilities to assess research and policy options to ensure stable, environmentally sustainable supplies of coal, oil, natural gas, and other critical materials such as rare earth elements.

FE's extensive energy infrastructure—which includes the nation's Strategic Petroleum Reserve, the Northeast Home Heating Oil Reserve, and the Northeast Gasoline Supply Reserve—facilitates responsible fossil energy development to enhance U.S energy security and promote job growth.

The Fossil Energy Home Page is at: <u>http://www.energy.gov/fe/office-fossil-energy</u>. The NETL Home Page is at: <u>http://www.netl.doe.gov</u>

Solicitations issued by NETL for FE Programs can be viewed at: <u>http://www.netl.doe.gov/business/solicitations/index.html</u>.

Contact: John Augustine Unsolicited Proposal Manager Email: <u>DOEUSP@NETL.DOE.GOV</u>

## Nuclear Energy

The Office of Nuclear Energy represents the core of the U.S. Government's expertise in nuclear engineering and technology and provides technical



leadership in addressing critical nuclear issues, contributing to energy supply diversity, and advancing U.S. competitiveness and security. We provide nuclear products and services that meet the needs of the U.S. and the world community in a safe, environmentally sound, and economical manner; encourages public involvement in our programs; and provides information to increase public knowledge. Details about our programs in the areas of nuclear power research and development, space power systems, facilities management, and science education can be found at our website: www.nuclear.gov/.

Contact:

Unsolicited Proposal Coordinator Office of Budget and Planning Tansel Selekler Email: <u>tansel.selekler@nuclear.energy.gov</u>

## Civilian Radioactive Waste Management

The Office of Civilian Radioactive Waste Management (RW) was established by the Nuclear Waste Policy Act (NWPA) of 1982 (42 U.S.C. 10224). The Office has

responsibility for the Nuclear Waste Fund and for the management of Federal programs for siting, licensing, constructing, and operating a repository for disposal of high-level radioactive waste and spent nuclear fuel; accepting and transporting high-level radioactive waste and spent nuclear fuel to a repository in 2010.

NWPA permits funding from the Nuclear Waste Funds' monies only for nongeneric research, development and demonstration activities directly supporting the development of RW's systems.

Contact:

Unsolicited Proposal Coordinator Contract Management Division (TBD) Email: TBD<u>@vmp.gov</u>

## Environmental Management

During the past nine years of its existence, the Department's Office of Environmental Management (EM) program has made significant progress in meeting the enormous challenge of cleaning up the nuclear weapons complex. In the initial stages of the program, the focus was on characterizing waste, assessing the magnitude of contamination, stabilizing material, addressing urgent risks and achieving regulatory compliance. The current focus is on completing the cleanup mission by establishing an acceleration and closure strategy.

EM's mission is realized through the following program areas: waste management; stabilization of nuclear material and spent fuel, deactivation and decommission of facilities, remedial actions to soil and water; infrastructure and support; and national programs focused on activities including science technology development, transportation, emergency management, and pollution prevention. The EM program is executed through 11 operations/field offices across the United States.

To reduce the costs of the massive cleanup effort, the Environmental Management program continues to seek significant opportunities to accelerate cleanup without jeopardizing the safety of





workers, communities, or the environment. The EM program has identified the six performance enhancement mechanisms (see Page 15) to assist in meeting the challenges of accelerating cleanup and reducing related costs.

For additional information on this program, visit their website at www.em.doe.gov.

## Contact:

Unsolicited Proposal Coordinator Toni Rutherford Email: <u>toni.rutherford@emcbc.doe.gov</u>

## EM Program Performance Enhancement Mechanisms

Mechanism	Achieves Efficiency By
Technology Deployment	Introducing less expensive and more effective cleanup technologies.
Integration	Identifying better ways to transfer and manage wastes among sites.
Project Sequencing	Concentrating on completing projects with high "upkeep" costs.
Pollution Prevention	Reducing waste volumes and associated disposal costs.
Contract Reform	Creating incentives for contractors to work more productively.
Lessons Learned	Increasing productivity through sharing of lessons learned.

## Office of Environment, Health, Safety, and Security

The Office of Environment, Health, Safety and Security (EHSS) is the Department of Energy's central organization responsible for health, safety, environment, and security; providing corporate-level leadership and strategic vision to coordinate and integrate these vital programs.



EHSS is responsible for policy development and technical assistance; safety analysis; corporate safety and security programs; education and training; complex-wide independent oversight; and enforcement. The Chief Health, Safety, and Security Officer advises the Deputy Secretary and the Secretary on all matters related to health, safety, and security across the complex.

For additional information on this program, visit their website at: <u>http://www.energy.gov/ehss/environment-health-safety-security</u>

Contact:

Unsolicited Proposal Coordinator Ron Barnes, Email: <u>Ron.Barnes@eh.doe.gov</u>

#### National Nuclear Security Administration (NNSA)

Established by Congress in 2000, NNSA is a semi-autonomous agency within the U.S. Department of Energy (DOE). NNSA is



responsible for enhancing national security through the military application of nuclear science. NNSA maintains and enhances the safety, security, reliability and performance of the U.S. nuclear weapons stockpile without nuclear testing; works to reduce global danger from weapons of mass destruction; provides the U.S. Navy with safe and effective nuclear propulsion; and responds to nuclear and radiological emergencies in the U.S. and abroad.

The Office of Defense Programs primary responsibility is partnering with the Department of Defense to provide a safe, secure, and effective stockpile for the Nation's nuclear deterrent. To carry out this mission, this office has responsibility for the policies, processes, and procedures for assuring effective integration of activities and implementation of programs across the weapons complex and with other NNSA programs and staff offices.

The Office of Defense Nuclear Nonproliferation provides policy and technical leadership to limit or prevent the spread of materials, technology, and expertise relating to weapons of mass destruction; advance technologies to detect the proliferation of weapons of mass destruction worldwide; and, eliminate or secure inventories of surplus materials and infrastructure usable for nuclear weapons.

The Office of Emergency Operations administers and directs the implementation and integration of emergency management programs across DOE and the NNSA complex. This office ensures that DOE and NNSA can respond promptly, efficiently, and effectively to any emergency involving or affecting DOE and NNSA sites and facilities or activities, or any emergency in which DOE and NNSA equities can assist, by applying the necessary resources to mitigate the consequences and protect workers, the public, the environment, and national security through the National Preparedness System and its associate Frameworks.

The Office of Safety, Infrastructure and Operations mission is to enable safe operations, ensure effective infrastructure, and provide enterprise services to meet the 21st Century Nuclear Security Enterprise (NSE) needs. To carry out this mission, this office has responsibility for the programs, policies, processes, and procedures for assuring effective integration of activities and implementation of programs across the NSE and with other NNSA programs and staff offices.

The Office of Defense Nuclear Security (DNS) is responsible for the overall direction and management of security programs at NNSA facilities. DNS serves as the cognizant organization for providing engineering, technical, operational, and administrative security support and oversight to both line management and field elements in order to assure effective security at NNSA facilities, to include the physical, personnel, materials control and accounting, classified and sensitive information protection, and technical security programs.

The Office of Counterterrorism and Counterproliferation (OC&C) mission is to advance counterterrorism and counterproliferation through innovative science, technology, and policy-driven solutions; and, is charged with understanding nuclear threat devices - improvised nuclear devices, nuclear devices of proliferation concern, and nuclear devices outside of state control.

The Office for Information Management and Chief Information Officer mission is to effectively execute and govern the complex, dynamic program of value-added, mission-enabling secure services that span both classified and unclassified environments across Headquarters, National Labs, Plants, and Field Offices. This office takes a risk management approach to developing IT applications and networks to ensure that cyber security is embedded in the IT fabric of the agency. Using an effective mix of technology, policy, and risk management practices will enable NNSA to enhance the information management of the Nuclear Security Enterprise.

NNSA's Naval Reactors Program provides the design, development and operational support to provide militarily effective nuclear propulsion plants and ensure their safe, reliable and long-lived operation.

The Office of Management and Budget (NA-MB) oversees a host of programs, initiatives, and assets that serve to maintain the vitality of the NNSA workforce and ensure the prudent use of its financial resources. NA-MB designs and administers the corporate planning, programming, budgeting, and evaluation (PPBE) system. NA-MB also provides the NNSA corporate systems and policies needed to manage NNSA's human resources.

The Office of External Affairs mission is to effectively communicate, promote and defend the NNSA mission, goals and budget through proactive outreach and sustainable relationship building with federal, state and local stakeholders, and with the public through the media.

The Office of Acquisition and Project Management (NA-APM) mission is to develop and implement policies, procedures, programs, and management systems to transform NNSA into a recognized leader in Acquisition and Project Management. NA-APM creates, integrates, and implements enterprise wide acquisition and project management systems that support mission execution and provide the best overall value for NNSA's programs and the American public.

For additional information on NNSA's Mission and Programs, visit NNSA at <u>http://www.nnsa.doe.gov</u>.

<u>Contact</u>: NNSA Unsolicited Proposal Coordinator Michael Loera NNSA Albuquerque Complex P.O. Box 5400 Albuquerque, NM 87185-5400 Email: <u>Michael.Loera@nnsa.doe.gov</u>

#### Advanced Research Projects Agency - Energy (ARPA-E)

ARPA-E does not accept unsolicited proposals. Instead, ARPA-E solicits for broad energy-related research applications using periodic (OPEN) and ongoing (IDEAS) Funding Opportunity Announcements (FOAs).



OPEN FOAs are generally issued every two to three years. You may visit ARPA-E's website to learn more about ARPA-E's OPEN FOAs at: <u>https://arpa-e-foa.energy.gov/Default.aspx?Archive=1</u>.

The IDEAS (Innovative Development in Energy-related Applied Science) FOA is an ongoing opportunity that solicits for the rapid support of early-stage applied research to explore innovative new concepts with the potential for transformational and disruptive changes in energy technology. You may visit ARPA-E's website to learn more about the IDEAS FOA at: <u>https://arpa-e-foa.energy.gov/Default.aspx</u>.

You can join ARPA-E's listserv to receive notifications about new ARPA-E FOAs. To join the listserv, please visit <u>http://arpa-e.energy.gov/</u> and sign up.

Contact:

Email: ARPA-E@hq.doe.gov(link sends e-mail)

#### Small Business Innovation Research Program

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs Office does not consider unsolicited proposals but instead evaluate proposals as part of a merit based competition. The purpose of the SBIR and STTR programs provides for increasing private sector commercialization of technology developed through DOE-supported R&D (research and



development), stimulating technological innovation in the private sector, and improving the return on high-quality research for economic and social benefits to the nation. DOE supports high-quality research or research and development on advanced concepts concerning important mission-related scientific or engineering problems and opportunities that could lead to significant public benefit if the research is successful. Applications are accepted for competitive evaluation in response to an annual Program Solicitation. Approximately 300 Phase I awards are made for a nine-month project period in an amount not to exceed \$150,000 each. The Phase I awardees are eligible to compete for Phase II funding, not to exceed \$1,000,000 for a two-year project period to further develop their work. For the commercialization phase (Phase III) the small business seeks funding from non-Federal sources outside the SBIR program. Also, under Phase III, Federal agencies may award non-SBIR/STTR funded follow-on grants or contracts for (1) products or processes that meet the mission needs of those agencies, or (2) further research or R&D. For additional information on this program, visit their website at <u>www.science.doe.gov/sbir</u>.

Contact:

U.S. Department of Energy 19901 Germantown Road Germantown, MD 20874 Carl Hebron Email: carl.hebron@science.doe.gov

## APPENDIX A UNSOLICITED PROPOSAL COVER SHEET

Proposal Receipt Date:	USP # (internal use)	
DOE Amount Requested: \$	_	
Taxpayer Identification No.: \$	Proposed Cost Share:	
Congressional District No.: \$:	Total Project Value	
Organization Name:		
Doing Business As (DBA), if applicable:		
Division:		
Street Address:		
City/State/Zip + 4:		
Email Address:		
Business Contact/Phone/FAX/Email:		
Principal Investigator/Phone/FAX/Email:		
Major Team Member/Subcontractor (if applicable):		

## Proposal Title:

Proposed Project Duration (6				
Organization Type	Support Type	Socio-Economics Type		
1-Educational 2-Foreign 3-Government 4-Hospital 5-Indian 6-Individual 7-Non-Profit 8-Profit	<ul><li>1-Development</li><li>2-Institutional Support</li><li>3-Interdisciplinary</li><li>4-Research</li><li>5-Training</li><li>6-Other</li></ul>	<ul><li>1-Disadvantaged Business</li><li>2-Small Business</li><li>3-Women Owned</li></ul>		
The proposal <b>does does</b> not	t contain proprietary inform	ation. (Check one)		
This proposal <b>may may</b> not	be subjected to external rev	view. (Check one)		
Name of other Federal, state, local agencies, or parties receiving the proposal or funding the proposed effort:				

Signature of person authorized to represent and contractually obligate the offeror: