

U.S. DEPARTMENT OF ENERGY
NOTICE OF FINANCIAL ASSISTANCE AWARD
(See Instructions on Reverse)

Under the authority of Public Law _____
and subject to legislation, regulations and policies applicable to (cite legislative program title): _____

<p>1. PROJECT TITLE Applied Research and Development of Technologies for the Management of Greenhouse Gases</p>	<p>2. INSTRUMENT TYPE <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT</p>	
<p>3. RECIPIENT (Name, address, zip code, area code and telephone no.) To All Prospective Offerors.</p>	<p>4. INSTRUMENT NO. DE-PS26-99FT40613</p>	<p>5. AMENDMENT NO. 001</p>
	<p>6. BUDGET PERIOD FROM: THRU:</p>	<p>7. PROJECT PERIOD FROM: THRU:</p>
<p>8. RECIPIENT PROJECT DIRECTOR (Name and telephone no.)</p>	<p>10. TYPE OF AWARD <input type="checkbox"/> NEW <input type="checkbox"/> CONTINUATION <input type="checkbox"/> RENEWAL <input type="checkbox"/> REVISION <input type="checkbox"/> SUPPLEMENT</p>	
<p>9. RECIPIENT BUSINESS OFFICER (Name and telephone no.)</p>		
<p>11. DOE PROJECT OFFICER (Name, address, zip code, telephone no.)</p>	<p>12. ADMINISTERED FOR DOE BY (Name, address, zip code, telephone no.) Deborah J. Boggs, (304) 285-4473 U.S. DOE, Federal Energy Technology Center P.O. Box 880, Morgantown, WV 26507-0880</p>	

13. RECIPIENT TYPE

<input type="checkbox"/> STATE GOV'T	<input type="checkbox"/> INDIAN TRIBAL GOV'T	<input type="checkbox"/> HOSPITAL	<input type="checkbox"/> FOR PROFIT ORGANIZATION	<input type="checkbox"/> INDIVIDUAL
<input type="checkbox"/> LOCAL GOV'T	<input type="checkbox"/> INSTITUTION OF HIGHER EDUCATION	<input type="checkbox"/> OTHER NONPROFIT ORGANIZATION	<input type="checkbox"/> C <input type="checkbox"/> P <input type="checkbox"/> SP	<input type="checkbox"/> OTHER (Specify) _____

14. ACCOUNTING AND APPROPRIATIONS DATA:				15. EMPLOYER I.D. NUMBER
a. Appropriation Symbol	b. B&R Number	c. FT/AFP/OC	d. CFA Number	

16. BUDGET AND FUNDING INFORMATION																			
<p>a. CURRENT BUDGET PERIOD INFORMATION</p> <table style="width:100%;"> <tr><td>(1) DOE Funds Obligated This Action</td><td>\$ _____</td></tr> <tr><td>(2) DOE Funds Authorized for Carry Over</td><td>\$ _____</td></tr> <tr><td>(3) DOE Funds Previously Obligated in this Budget Period</td><td>\$ _____</td></tr> <tr><td>(4) DOE Share of Total Approved Budget</td><td>\$ _____</td></tr> <tr><td>(5) Recipient Share of Total Approval Budget</td><td>\$ _____</td></tr> <tr><td>(6) Total Approved Budget</td><td>\$ _____</td></tr> </table>	(1) DOE Funds Obligated This Action	\$ _____	(2) DOE Funds Authorized for Carry Over	\$ _____	(3) DOE Funds Previously Obligated in this Budget Period	\$ _____	(4) DOE Share of Total Approved Budget	\$ _____	(5) Recipient Share of Total Approval Budget	\$ _____	(6) Total Approved Budget	\$ _____	<p>b. CUMULATIVE DOE OBLIGATIONS</p> <table style="width:100%;"> <tr><td>(1) This Budget Period [Total of lines a.(1) and a.(3)]</td><td>\$ _____</td></tr> <tr><td>(2) Prior Budget Periods</td><td>\$ _____</td></tr> <tr><td>(3) Project Period to Date [Total of lines b.(1) and b.(2)]</td><td>\$ _____</td></tr> </table>	(1) This Budget Period [Total of lines a.(1) and a.(3)]	\$ _____	(2) Prior Budget Periods	\$ _____	(3) Project Period to Date [Total of lines b.(1) and b.(2)]	\$ _____
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(6) Total Approved Budget	\$ _____																		
(1) This Budget Period [Total of lines a.(1) and a.(3)]	\$ _____																		
(2) Prior Budget Periods	\$ _____																		
(3) Project Period to Date [Total of lines b.(1) and b.(2)]	\$ _____																		

17. TOTAL ESTIMATED COST OF PROJECT \$ _____
(This is the current estimated cost of the project. It is not a promise to award nor an authorization to expend funds in this amount.)

18. AWARD AGREEMENT TERMS AND CONDITIONS
This award/agreement consists of this form plus the following:

a. Special terms and conditions.

b. Applicable program regulations (specify) _____ (Date) _____.

c. DOE Assistance Regulations, 10 CFR Part-600, as amended.

d. Application/proposal dated _____, as submitted with changes as negotiated.

19. REMARKS

The purpose of this amendment is to respond to questions received by the government regarding the Federal Assistance Solicitation DE-PS26-99FT40613. For a description of the amendment, please refer to the following pages.

Offerors must acknowledge receipt of this amendment (Block 20) prior to the hour and due date specified in the solicitation or as amended by acknowledging receipt of this amendment on each copy of the offer submitted.

<p>20. EVIDENCE OF RECIPIENT ACCEPTANCE</p> <p>_____ (Signature of Authorized Recipient Official) (Date)</p> <p>_____ (Name)</p> <p>_____ (Title)</p>	<p>21. AWARDED BY</p> <p>_____ (Original signed by Randolph R. Cooper) (Date)</p> <p>_____ Randolph R. Cooper (Name)</p> <p>_____ Contracting Officer (Title)</p>
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INSTRUCTIONS

(This form shall be completed in accordance with the following instructions. For any clarification or additional information that might be needed, consult the appropriate section of the DOE Financial Assistance Procedures Manual (DOE-FAPM).)

Insert in the space provided, in the line which begins, "Under the Authority of Public Law ...," the number and the name of the Public Law which authorizes this award. On the line below, enter the title of the pertinent program.

Block 1 — Enter the project title as it appears in the SF-424 or equivalent application/proposal face sheet.

Block 2 — Place a checkmark in the box beside the appropriate financial assistance instrument.

Block 3 — Enter the name, address, and telephone number of the applicant/proposer as it appears in the SF-424 or equivalent application/proposal face sheet.

Block 4 — Enter the instrument number. (See DOE-FAPM.)

Block 5 — Enter the appropriate amendment number. (See DOE-FAPM for guidance.)

Block 6 — Enter the starting date and expiration date for the current budget period. If a budget period is being changed, enter the starting date and expiration date for the budget period, as changed.

Block 7 — Enter the starting date and anticipated completion date for the project. If a project period is being changed, enter the starting date and anticipated completion date for the project period, as changed.

Block 8 — Enter the name and telephone number of the individual designated by the applicant/proposer as the director of the project.

Block 9 — Enter the name and telephone number of the individual designated by the applicant/proposer as the contact for all business matters.

Block 10 — Place a checkmark in the box opposite the term which identifies the type of action being taken. (The terms are defined in the DOE-FAPM.)

Block 11 — Enter the name, address, and telephone of the individual designed by the DOE program office as the project officer.

Block 12 — Enter the name, address, and telephone number of the individual/organization who will administer the agreement for DOE.

Block 13 — Place a checkmark in the box beside the applicable recipient type. If the recipient is a for-profit organization, also check one of the lower boxes as follows: "C" for Corporation, "P" for Partnership, and "SP" for Sole Partnership. If the recipient is of a type not indicated, place a checkmark in the box beside "Other," and identify the recipient type in the space provided.

Block 14 — Enter where indicated, the appropriation symbol, B&R number, Fund Type (FT)/AFP Code (AFP)/Objective Class (OC) and CFA Number from the Procurement/Financial Assistance Request Authorization (DOE Form PR-799A). Completion Block 14.d. is required only for awards made by Headquarters.

Block 15 — Enter the applicant's/proposer's Federal Employer Identification No. from the SF-424 or equivalent application/proposal face sheet, or if the applicant/proposer is an individual, enter his/her social security number.

Block 16 — Entries should be made as follows. (If no dollar entry is appropriate, a zero should be entered to indicate there was no error of omission.)

Line a.(1) — Enter the amount of DOE funds obligated by this action.

Line a.(2) — Enter the amount of DOE funds not expended in prior budget period(s), if any, authorized by DOE for expenditure in the current budget period.

Line a.(3) — Enter the amount of DOE funds previously obligated in the current budget period.

Line a.(4) — Enter DOE's share of the total approved budget shown in Line a.(6).

Line a.(5) — Enter the recipient's share of the total approved budget shown on Line a.(6).

Line a.(6) — Enter the total approved budget for the current budget period. (Add the amounts in Lines a.(4) and a.(5).)

Line b.(1) — Enter the amount of DOE funds obligated in the current budget period. (Add the amounts in Lines a.(1) and a.(3).)

Line b.(2) — Enter the amount obligated by DOE in prior budget periods.

Line b.(3) — Enter the amount obligated by DOE in the project period to date. (Add the amounts in Lines b.(1) and b.(2).)

Block 17 — Must be completed for cooperative agreements. Contracting Officers may exercise discretion as to whether to complete it for grants. Enter the blank provided, the amount which represents the current estimate of total funds and dollar value of in-kind contributions (both DOE and recipient shares) needed to carry out the entire project. Include all funds and contributions previously provided, those being provided by this action, and all anticipated future obligations and contributions of both parties.

Block 18 — Complete as follows.

Item a. — No entry necessary.

Item b. — Enter the legal citation from the Code of Federal Regulations or Federal Register and the effective date for the program regulations applicable to the program under which the award is made.

Item c. — Mark the box beside B for grants or C for cooperative agreements.

Item d. — In the blank provided, enter the date of the application/proposal. (If SF-424 is used, see block 23c on page 1.) Place a checkmark in the appropriate box to indicate whether the application/proposal was accepted as submitted or with negotiated changes.

Block 19 — Enter any explanation or advisory comments which are required for, or applicable to, this action.

Block 20 — Will be completed by the recipient.

Block 21 — The Contracting Officer shall sign and date the top line. His/her name and title should be entered on the next two lines. This box must be signed prior to forwarding to recipient.

FEDERAL ASSISTANCE SOLICITATION NO. DE-PS26-99FT40613
**APPLIED RESEARCH AND DEVELOPMENT OF TECHNOLOGIES FOR THE MANAGEMENT OF
 GREENHOUSE GASES**

Amendment 001

The purpose of this amendment is to respond to questions received by the Government prior to November 3, 1999, to amend the solicitation document to include EPACT requirements and emphasize these requirements by adding the word “applied” to the solicitation title, and modify the number of copies to be submitted to DOE. Accordingly, the solicitation is amended as follows:

1. The cover memo subject line is deleted in its entirety and replaced with the following:

“Program Solicitation for Federal Assistance Applications for “Applied Research and Development of Technologies for the Management of Greenhouse Gases,” Program Solicitation Number DE-PS26-99FT40613.”

This change is necessary to insert the word “Applied” in the title.

2. On the title page of the solicitation delete the title in its entirety and replace it with the following:

“Applied Research and Development of Technologies for the Management of Greenhouse Gases”

This change is necessary to insert the word “Applied” in the title.

3. Delete the 10th paragraph of the cover memorandum: “Cost Share: Offerors are advised that cost sharing is not required but encouraged,” and replace it with the following paragraph:

“Applicants are advised that this solicitation contains a requirement for Recipients to cost share a minimum of 20 percent of the total estimated cost of the project. This level of cost sharing is consistent with Sections 3001 and 3002 of the Energy Policy Act (EPAct) 42 U.S.C. 13542 for financial assistance awards.

4. The following clause is added to Section V:

“CLAUSE 5.41 ADDITIONAL ELIGIBILITY REQUIREMENTS OF THE ENERGY POLICY ACT OF 1992 (JULY 1999)”

Awards under this solicitation also are subject to the eligibility requirements stated in Section 2306 of the Energy Policy Act of 1992 (EPAct). An applicant private sector firm shall be eligible to receive financial assistance under this section only if it is a United States-owned company, or the firm is incorporated in the United States and has a parent company which is incorporated in a country which affords to United States-owned companies: (1) opportunities comparable to those afforded to any other company to participate in any joint venture similar to the one described in this solicitation; and (2) adequate and effective protection for United States companies’ intellectual property rights.

In addition, the applicant must show that the project, as a whole, is in the economic interest of the United States. To fulfill this requirement, the applicant must consider the contributions of all participants in the project, including any contractors or suppliers that the applicant has named and relied upon in its application. This can be evidenced by: (1) investment in the United States in research, development, and manufacturing, such as the manufacture of major components or subassemblies in the United States; (2) significant contributions to employment in the United States; (3) agreement with respect to any technology arising from assistance provided under this solicitation to promote the manufacture within the United States of products resulting from that

technology, taking into account the goals of promoting the competitiveness of United States industry, and to procure parts and materials from competitive suppliers.

All applicants shall complete documentation providing a certification of eligibility under Section 2306 of the EPACT. Based on the information received, a determination by DOE that the EPACT eligibility requirements are met should be made prior to award of an agreement.

A. **Company Ownership Information:**

1. Is your company a United States owned company? A United States company means (1) a company that has majority ownership by individuals who are citizens of the United States, or (2) a company organized under the laws of the State that either has no parent company or has a parent company organized under laws of a State.
2. If your answer to Question No. 1 is no, identify the place in which the parent company is incorporated or organized.

B. **Economic Interest Information:**

1. Will this project result in investments in the United States in research and development? If the answer is yes, what percentage of the total estimated cost of the project will be expended in the United States? (Contractor and supplier costs are to be included in total estimated costs.) Also, please express in terms of U.S. dollars.
2. Will this project result in investments in the United States and in manufacturing? If the answer is yes, what percentage of the total estimated cost of the project including contractor and supplier costs will be expended in the United States on manufacturing? Also, please express in terms of U.S. dollars.
3. Will this project contribute to the United States employment? If the answer is yes, describe how.
4. Does your agree that it will promote the manufacture within the United States of products resulting from the subject technology, and competitively procure parts and materials?

Describe plans, if any, for any manufacturing of products arising from the program supported research and development, including the location where such manufacturing is expected to occur. If your answer is no, please provide a detailed explanation.
5. What other benefits to the United States will result from this project?
6. After completing the preceding questions, please make the following representation: "To the best of our current knowledge and belief, the information provided is current, accurate, and complete and will advise the Department of any changes prior to award of the amendment."

Additional information on EPAct can be found at--

<http://policyworks.gov/org/main/mt/homepage/mtv/epact.htm>.

5. SECTION V -- CONDITIONS AND NOTICES, Clause 5.2 -- COST SHARING is deleted in its entirety and replaced with the following:

"Clause 5.2 -- COST SHARING-- In order to be recognized as allowable cost sharing, a cost must be otherwise allowable in accordance with the applicable Federal cost principles and DOE regulations governing cost sharing. All cost sharing or matching contributions, including cash and third party contributions shall meet the following criteria:

- (1) are verifiable from the contractor's records,
- (2) are necessary and reasonable for proper and efficient accomplishment of project or program objectives,
- (3) are not included as contributions for any other federally-assisted project or program,
- (4) are allowable and allocable under the applicable cost principles,
- (5) are not paid by the Federal Government under another award, except where authorized by Federal statute to be used for cost sharing or matching.

Although not all-inclusive, provided below is a list of costs that are unallowable as project costs and, therefore, unallowable for cost sharing:

Costs incurred in negotiating an award with DOE are not allowable as direct charges to the project.

DOE shall not accept valuation for property sold, transferred, exchanged, or manipulated in any way to acquire a new basis for depreciation purposes or to establish a fair use value in circumstances that would amount to a transaction for the purpose of the award.

DOE will not share in both the direct cost and depreciation on the same item. Depreciation is not allowable for cost sharing on any item previously charged to the project as a direct cost. For example, DOE will cost share the direct cost on equipment or facilities purchased or constructed for the project; but, will not also cost share the depreciation.

Interest on borrows (however represented) and other financial costs such as bond discounts, cost of financing and refinancing capital (net worth plus long-term liabilities), are unallowable project costs. This includes interest on funds borrowed for construction.

Facilities capital cost of money shall be an unallowable cost on all real property or equipment acquired by or on behalf of the Recipient in connection with the performance of the project.

Previously expended research, development, or exploration costs are unallowable.

Forgone fees, forgone profits, or forgone revenues are unallowable.

Fee or profit paid to any member of the proposing team having a substantial interest in the project is unallowable. Competitive subcontracts placed with the prior written consent of the Contracting Officer and subcontracts for routine supplies and services are not covered by this prohibition.

The value of patents and data contributed to the project is unallowable.

Allowable costs under past, present, or future Federal Government contracts, grants or Cooperative Agreements may not be charged against this award. Likewise, the Recipient may not charge costs allowable under this project, including any portion of its cost share to the Federal Government under any other contracts, grants, or Cooperative Agreements.

Business losses are unallowable."

6. The following clause is added to Section V:

“Clause 5.42 Performance of Work in the United States -- As a condition of award under this solicitation, applicants must agree that at least 70 percent of the direct labor cost for the project (including subcontractor labor) will be incurred in the United States unless the applicant can demonstrate to the satisfaction of DOE that the United States economic interest will be better served through a greater percentage of the work performed outside the United States. For example, an applicant may provide evidence that expertise to develop a technology

exists only outside the United States, but that ultimate commercialization of the technology will result in substantial benefits to the United States such as increased employment, increased exports of U.S.-manufactured products, etc.”

7. **Section VI - APPLICATION PREPARATION INSTRUCTIONS, Clause 6.2 OVERALL ARRANGEMENT OF APPLICATION (AUG 1999)** is deleted in its entirety and replaced with the following:

“SECTION VI - APPLICATION PREPARATION INSTRUCTIONS , Clause 6.2 OVERALL ARRANGEMENT OF APPLICATION (AUG 1999)

The overall application shall consist of two (2) physically separated volumes, individually entitled as stated below. Submit the required number of each application volumes shown in the matrix below.

VOLUME ORIGINAL NUMBER OF COPIES ELECTRONIC VERSION

Volume I -- Business and Financial Application	1	5	1
Volume II -- Technical Application	1	5	1*

*The electronic version of the technical application shall be submitted in WordPerfect 6.1 or Adobe Acrobat Portable Document format.”

This change reflects an increase to the number of additional copies of the application required by DOE.

8. **SECTION VI - APPLICATION PREPARATION INSTRUCTIONS** - Clause 6.3 VOLUME 1-- BUSINESS AND FINANCIAL APPLICATION PREPARATION INSTRUCTIONS (AUG 1999) is deleted in its entirety and replaced with the following:

“SECTION VI - APPLICATION PREPARATION INSTRUCTIONS - Clause 6.3 VOLUME 1-- BUSINESS AND FINANCIAL APPLICATION PREPARATION INSTRUCTIONS (AUG 1999)

Volume I consists of an application coversheet, application forms, assurances, budget pages, environmental questionnaire, exceptions and deviations to the model award, and any other business and financial information.

The application identified as the original shall contain all original signatures of all documents requiring a signature by the offeror. Use of reproductions of signed originals is authorized in all other copies of the application.

The applicant shall not provide application information in three-ring binders.

All forms needed for preparation of Volume I are found on the FETC website at: <http://www.fetc.doe.gov/business/forms> in either WordPerfect or Portable Document Format (PDF). Furthermore, a listing of the Volume I forms is presented in the table below:

Form #	Title
assure.fa	Financial Assistance Assurance Package
1600.5	*Assurance of compliance
4600.4	Federal Assistance Budget Information
4620.1	Budget Page
4220.35	*Additional Representations and Certifications for Federal Financial Assistance
4220.38	FETC Assurance, Non-Construction Programs
nenpasol	Environmental Questionnaire for Solicitations
424	Application for Federal Assistance
424b	Assurances-Non-Construction Programs
SFLLL	*Disclosure of Lobbying Activities
	*Form also contained within form file: assure.fa.”

9. The following clause is added to Section VI:

“6.3.8. Economic Benefit to the United States --Applicants must provide a separate discussion, not exceeding five (5) pages in length, explaining how the proposed work will benefit the economic interest of the United States. This may be evidenced by (1) investments in the United States in research, engineering, and manufacturing (including, for example, manufacture of major components or subassemblies in the United States; (2) significant contributions to employment in the United States; and (3) agreements to promote the manufacture within the United States of products resulting from technology developed under the project. A description of the quantitative benefits supported by a convincing rationale is preferable to a qualitative discussion. DOE expects that this information will be realistic and constitute a sincere commitment by the applicants to promote economic benefits for the United States.”

The purpose of this addition is to have the proposer explain the project benefits to the United States economic interest.

10. **SECTION VI -- APPLICATION PREPARATION INSTRUCTIONS**, Clause 6.6 GENERAL TECHNICAL INFORMATION (AUG 1999), item 4 titled LIKELIHOOD OF COMMERCIAL APPLICATION shall be deleted in its entirety and replaced with the following paragraph:

“4. LIKELIHOOD OF COMMERCIAL APPLICATION

Provide the expected cost of commercializing the sequestration technology, expressed in dollars per ton of carbon equivalent emission avoided. Describe the capability to compete with other commercial processes. Demonstrate the degree to which the activity identifies and makes progress on new concepts, thereby increasing the likelihood of a successful sequestration program. Identify parties capable of commercializing in a timely manner or producing products using the proposed technology. Estimate the length of time before the project is likely to be commercially successful. Show the likelihood of obtaining patent or **intellectual** property rights. Identify the potential of securing cost sharing including in-kind

contributions and corporate commitment. If fundamental scientific knowledge and understanding are proposed, identify how it can contribute to the development of commercial technologies.”

The only change to this paragraph is reflected in bold print to show the addition of the word “intellectual”.

11. **SECTION VI -- APPLICATION PREPARATION INSTRUCTIONS** , Clause **6.8 APPENDICES -- Statement of Project Objectives Instructions (JULY 1999)**, paragraph **E.1 BRIEFINGS/TECHNICAL PRESENTATIONS (If applicable)**, shall be deleted in its entirety and replaced with the following paragraph:

“E.1. BRIEFINGS/TECHNICAL PRESENTATIONS (If applicable).

The Recipient shall prepare detailed briefings for presentation to the COR at the COR’s facility located in Pittsburgh, PA or Morgantown, WV. Briefings shall be given by the Contractor to explain the plans, progress, and results of the technical effort within 60 days of award and annually thereafter.”

The changes reflects the briefing schedule of plans, progress, and results of the technical effort.

12. **Section V -- Conditions and Notices, Clause 5.13 Time, Date and Place Applications Are Due - Multiple Due Dates (AUG 1999)**. The closing date for Evaluation Period 1 is extended by fifteen days from January 3, 2000 to January 18, 2000. Therefore, in order for applications to be considered for review during the first evaluation period applications must be received no later than 4:00 p.m. eastern standard time on January 18, 2000. The mailing address and point-of-contact remains unchanged.
13. Section VII -- Evaluation and Selection, Clause 7.3 Preliminary Evaluation (July 1999) shall be deleted in its entirety and replaced with the following clause:
- “Prior to a comprehensive evaluation, applications will undergo an initial review to determine whether the information required by the solicitation has been submitted and is properly completed. Applications will be reviewed for relevance to the Environmental Program and for responsiveness to the technical requirements of the solicitation. Applications will also be reviewed to insure that the requirement for Recipients to cost share a minimum of 20 percent of the total estimated cost of the project has been met. Volume I of the application will be reviewed to assess the applicant’s eligibility under the lobbying, EPAct, and Simpson-Craig Amendment requirements. Failure to successfully meet any one of these preliminary evaluation criteria may result in the elimination of the application and no further consideration in the comprehensive evaluation. In the event that an application is eliminated, a notice will be sent to the Applicant stating the reason(s) that the application will not be considered for financial assistance under this solicitation.”
14. Section VII -- Evaluation and Selection, Clause 7.7 Cost Evaluation Criteria (July 1999) shall be amended by the addition of a third criteria:
- “c. Proposed level of cost sharing.”
15. Section VI -- Application Preparation Instructions, Clause 6.4 Volume II -- Technical Application Preparation Instructions (Aug 1999) shall be amended by the addition of a proposal cover-sheet for Volume II and shall be provided with the original and each copy of Volume II. The proposal cover-sheet for Volume II is contained in Attachment 2 to this amendment.
16. Attachment 1 contains a listing of questions received from prospective offerors and the Government’s response to those questions.

Attachment 1
Questions and Answers

Numerous questions have been received requesting clarification or guidance regarding various aspects of this solicitation. The questions below paraphrase the questions received and are answered to clarify our original intent.

Several ideas were presented for consideration as to their viability and appropriateness to the solicitation requirements. However, DOE is unable to determine viability and appropriateness based on the limited information provided. DOE will evaluate and score all applications submitted in response to this solicitation in accordance with the criteria set forth in the solicitation.

Question 1

Are foreign entities permitted to respond to the solicitation as a recipient or subrecipient?

Response to Question 1

Yes, foreign entities are permitted to respond to solicitation no. DE-PS26-99FT40613 as prime recipients or subrecipients, but is subject to the eligibility requirements of Section 2306 of the Energy Policy Act. Please refer to the amendment for additional clarification.

Question 2

Is the \$15-18 million for the first year, with additional monies anticipated for the second and third years?

Response to Question 2

Subject to the availability of funds, DOE expects to provide \$15-18 million over the 3-year period for awards under this solicitation.

Question 3

What is the anticipated number of awards, either total or by each of the 5 areas?

Response to Question 3

The exact number of awards is unknown. However, the Government does anticipate multiple awards covering the various areas of interest after the evaluation process identified in Section VII of the solicitation has been completed and sufficient applications proven to be meritorious. The Government reserves the right to fund, in whole or in part, any, all, or none of the applications submitted in response to this solicitation, and will award that number of financial assistance instruments that serve the public purpose and are in the best interest of the Government.

Question 4

Are all areas likely to be equally funded assuming an equal amount of good proposals in each area?

Response to Question 4

No, there is no set dollar amount or number of proposals determined for selection in each area. See response to Question No. 3.

Question 5

Is there an average annual dollar amount for an award being considered by FETC and what number of proposals do you anticipate funding?

Response to Question 5

There is no dollar amount set for each award and we have no way of knowing how many proposals will be funded. See response to Question No. 3.

Question 6

Will the DOE entertain proposals concerning methane (as a greenhouse gas) and its release into the atmosphere as a result of fuel (“energy”) production?

Response to Question 6

Methane is in itself a greenhouse gas which oxidizes in the atmosphere to CO₂. DOE will therefore evaluate proposals concerning methane and its release into the atmosphere.

Question 7

What do FFRDC and DOE M&O mean?

Response to Question 7

“Management and Operating contract (M&O)” means an agreement under which the Government contracts for the operation, maintenance, or support, on its behalf, of a Government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of the contracting Federal agency. See also Federal Acquisition Regulation (FAR) 17.6 for additional clarification.

“Federally Funded Research and Development Centers (FFRDCs)” means activities that are sponsored under a broad charter by a Government agency (or agencies) for the purpose of performing, analyzing, integrating, supporting, and/or managing basic or applied research and/or development, and which receive 70 percent or more of their financial support from the Government; a long-term relationship is contemplated; most or all of the facilities are owned or funded by the Government; and the FFRDC has access to Government and supplier data, employees, and facilities beyond that which is common in a normal contractual relationship. The National Science Foundation maintains the master list of FFRDC’s. See also FAR 35.017 for additional clarification. Additional information on this subject can be found in the solicitation memorandum.

Question 8

Can National Labs respond to this solicitation?

Response to Question 8

The response to this question is contained on Page 2, Paragraph 3 of the memorandum in the initial solicitation dated 9/8/99.

Question 9

When are the proposals due?

Response to Question 9

The response to this question is contained in Clause 5.13 of the solicitation as modified by this amendment.

Question 10

Are the forms available for DE-PS26-99FT40613 on the Internet?

Response to Question 10

Yes, forms are available on FETC’s Homepage at <http://www.FETC.DOE.GOV/BUSINESS/FORMS>.

Question 11

Will DOE review pre-proposals submitted by prospective offerors?

Response to question 11

No.

Question 12

What is considered cost share and is it better to work alone or work with another company?

Response to Question 12

Cost sharing is defined in 10 CFR 600.30. Individual or group efforts are acceptable. No evaluation weight has been assigned to individual or group efforts. Review will be based on the merit of the proposal. In some cases, multi disciplinary groups are often better equipped to identify and address the important issues associated with the development of new technologies.

Question 13

Is the zip code correct as listed in the solicitation?

Response to Question 13

Yes. FETC uses 26507-0880 for all services.

Question 14

Can the same identical proposal be submitted under two topic areas, with the required originals and copies provided for each topic area?

Response to Question 14

The proposer should decide the most appropriate topic area to submit the proposal for consideration. The same proposal should not be submitted to different topic areas.

Question 15

Can you indicate a source and full bibliographic information for the SFA Pacific, Inc. Report referred to in topic Area Separation and Capture?

Response to Question 15

Simbeck, Dale. A Portfolio Selection Approach for Power Plant CO₂ Capture , Simulation and R&D Options. Greenhouse Gas Control Technologies. Proceedings of the 4th International Conference on Greenhouse Gas Control Technologies. August 30-September 2, 1998, Interlaken, Switzerland, pp. 119-124.

Question 16

Are matching funds required for this grant?

Response to Question 16

Cost sharing or matching contributions, including cash and third party in-kind, is required. Please refer to the amendment for additional clarification.

Question 17

The solicitation appears to require proposals that would estimate the CO₂ sequestration potential of a particular approach. While estimates can always be made for anything, surely the very heart of the research contemplated is to define this. Please explain?

Response to Question 17

An estimate of sequestration potential is required which could be refined during the research effort.

Question 18

Obviously, as clearly stated the need for the CO₂ to remain in whatever formation it is injected into is critical to program success. What is not explicitly addressed is the potential detrimental environmental impact that may accompany such activities that could go beyond leakage. Is this to be considered?

Response to Question 18

The National Environmental Policy Act (NEPA) of 1969 establishes a national policy to ensure that consideration is given to environmental values and factors in Federal planning and decision making. The Department's policy is to comply fully with the letter and spirit of NEPA. Therefore, sequestration activities need to be carried out in an environmental acceptable manner. Expressed concern regarding leakage is not meant to be limiting but is an obvious concern that needs to be addressed in the application as to the environmental impact will be minimized.

Question 19

It seems likely that many proposals could overlap in content. Is it the intention of the DOE to in effect negotiate with a short list of potential winners to amend the scope of work presented so that such overlap is minimized and the efforts made more complementary?

Response to Question 19

The DOE can accept any or all parts of the work proposed from any given offeror.

Question 20

Are there any limitations imposed on the use of individual consultants? Are there any limitations imposed on the compensation paid to consultants?

Response to Question 20

No, there are no limitations imposed on the use of individual consultants. However, please refer to the cost principles contained in FAR 31.205-33 for guidance on professional compensation.

Question 21

The solicitation makes mention of significant DOE personnel involvement in the implementation of the awarded projects. Would this be in the form of monthly meetings in Morgantown or the investigator's offices or both?

Response to Question 21

It is anticipated that there will be substantial involvement between the DOE and the recipient during performance of the research activity. This may be in the form of monthly/quarterly meetings, weekly conference calls, or monthly status reports. The following are examples of relationships that require substantial Federal agency participation and where a type of cooperative agreement should be used:

- Federal project management or Federal program or administrative assistance;

- Federal/recipient collaboration in performing the work; and
- Federal monitoring to permit specified kinds of direction or redirection of the work.

Question 22

Is it contemplated that DOE personnel would participate in guiding the scope and direction of research as this develops during the project?

Response to Question 22

See response to Question No. 21.

Question 23

Would the DOE assist in making available any relevant non classified information already in the possession of the DOE but perhaps not published?

Response to Question 23

When deliverables are developed under a Government award, the deliverables become the property of the DOE and are made available to the public by the Office of Scientific and Technical Information (OSTI). Such deliverables can be obtained at the following address:

OSTI
P.O. Box 62
175 Oak Ridge Turnpike
Oak Ridge, Tennessee 37831
865/576-8401

Question 24

Would Federal personnel from local DOE offices be involved in this project?

Response to Question 24

All technical and administrative functions will be managed by personnel from the Federal Energy Technology Center.

Question 25

What limitations are imposed on incorporating outside commercial laboratories in the proposed scope of work, given that such services would incorporate an element of profit?

Response to Question 25

There is no limitation on incorporating outside commercial laboratories in the proposed scope of work. However, fee or profit paid to any member of the proposing team having a substantial interest in the project is unallowable. Competitive subcontracts placed with the prior written consent of the Contracting Officer and subcontracts for routine supplies and services are not covered by this prohibition.

Question 26

Proof of concept is clearly a key issue in the longer term. Since only 15% of the proposal merit weighting is geared to commercial considerations, is it likely that additional funding could be made available in the future for commercial sized proof of concept?

Response to Question 26

DOE expects to provide \$15-18 million over the 3-year period for awards under this solicitation, subject to the availability of funds. Any additional funding is unknown at this time.

Question 27

Co-funding is not required but desirable. If co-funding were part of any proposal, would this have any effect on the selection process, if so to what extent?

Response to Question 27

As a result of this amendment, applicants are now required to cost share a minimum of 20 percent of the total estimated cost of the project. This level of cost sharing is consistent with Sections 3001 and 3002 of the Energy Policy Act for financial assistance awards. Selection of an application by the Department will be achieved through a process of evaluating and comparing the relative merits of the applicants complete applications, in accordance with all of the evaluation factors set forth in the solicitation and by considering the Program Policy Factors. The costs proposed will be evaluated in accordance with the following criteria:

- reasonableness and appropriateness of cost;
- evaluated probable cost to the Government;
- required cost share and/or in-kind contributions.

Question 28

Is it correct for us to imply that the DOE requested Roman Numeral pages for public abstract, table of contents, list of tables, list of figures and list of acronyms do not count towards the 30 page limit?

Response to Question 28

Everything listed in the question counts toward the 30-page limitation except for the resumes and appendixes A, B, and C.

Question 29

Clarification is needed on how the last two of the evaluation criteria; namely, sequestration potential and likelihood of commercial application, with 35% of the total scoring, will be applied to a proposal for assessment of existing sequestration concepts. Are we incorrect in our belief that these two evaluation criteria do not apply to a proposal in response to topic F? If we are correct, how will DOE evaluate proposals for topic F?

Response to Question 29

All technical evaluation criteria contained in Section VII of the solicitation will be used to evaluate all proposals received by the Department regardless of the Topic Area of Interest.

Question 30

If an educational institution is interested in developing a proposal in response to this call and two FFRDCs, each with unique user facilities are potential collaborators, is the total participation for the two FFRDCs limited to 25% total, or can it be 25% each for a total of 50%?

Response to Question 30

FFRDC participation is restricted to only 25% of the total estimated project cost regardless of the number of FFRDCs proposed by the offeror.

Attachment 2

This is the Proposal Coversheet for Volume II and shall be provided with the original and each copy of Volume II.

VOLUME II -- TECHNICAL APPLICATION COVERSHEET
Applied Research and Development of Technologies for the Management of Greenhouse Gases
DE-PS26-99FT40613

Proposal No. _____
 (For official use only)

Proposal Date: _____
 Acceptance Days: _____

Proposed Title: _____

Topic Area: (Check One Appropriate Block)

- Separation and Capture
- Sequestration of CO₂ in Geologic Formations
- Ocean Sequestration
- Carbon Sequestration in Terrestrial Ecosystems (Soils and Vegetation)
- Advanced Concepts (Chemical, Biological, and Other Approaches)
- Modeling and Assessments

Proposed Stage of R&D: {Check Appropriate Block(s)} -- See Attachment 3 of the amendment for a definition of the various stages of research and development.

- Basic Research
(Dollar Value: \$ _____ & Percentage: _____)
- Applied Research and Exploratory Development
(Dollar Value: \$ _____ & Percentage: _____)
- Advanced Development
(Dollar Value: \$ _____ & Percentage: _____)
- Engineering/Operational Systems Development
(Dollar Value: \$ _____ & Percentage: _____)

Company Name: _____

Address: _____

Point of Contact: _____

Telephone/FAX Number: _____

Principal Investigator: _____

Telephone Number: _____

PROPRIETARY INFORMATION: Does this submittal contain Proprietary or Confidential Information?

____ NO

____ YES (if yes, complete box below)

NOTICE OF RESTRICTIONS ON DISCLOSURE AND USE OF DATA

The data contained on pages _____ of this proposal are submitted in confidence and contain trade secrets or privileged or confidential commercial and financial information. Such data may be used or disclosed only for evaluation purposes. If an award is made to the applicant as a result of or in connection with the submission of this proposal, the Government shall have the right to use or disclose data herein to the extent provided in the award. This restriction does not limit the Government's right to use or disclose data obtained without restriction from any source, including the applicant.

Attachment 3

Basic Research - includes all scientific effort and experimentation directed toward increasing knowledge and understanding in those fields of the physical, engineering, environmental, social, and life sciences related to long-term national needs. It provides fundamental knowledge ultimately required for the solution of social, economic, political, physical, or military problems. It forms a part of the base for subsequent applied research and exploratory and advanced development in the various disciplines, and new or improved functional capabilities.

Applied Research and Exploratory Development - includes all effort directed toward the solution of specific problems, short of major development projects. This type of effort may vary from fairly fundamental applied research to quite sophisticated bread-board hardware, study, programming, and planning efforts. It would thus include investigations and minor development effort. The dominant characteristic of this category of effort is that it be pointed toward specific problem areas with a view toward developing and evaluating the feasibility and practicability of proposed solutions and determining their parameters.

Advanced Development - includes all effort directed toward projects which have moved into e.g., the development of hardware for test. The prime result of this type of effort is proof of design concept and/or prototype.

Engineering/Operational Systems Development - includes those projects in full-scale engineering development.