



December 20, 2011

REQUEST FOR PROPOSAL (RFP)

RFP2011UN001

UNCONVENTIONAL ONSHORE PROGRAM

Table of Contents

STATEMENT OF PROGRAM OPPORTUNITY	1
A. Background Information	1
B. Program Objectives	1
C. Objectives for this Solicitation.....	2
D. Scope	2
ATTACHMENT I – INSTRUCTIONS TO OFFERORS.....	5
RFP Summary	5
I. General.....	6
II. Schedule	7
III. Preparation of Offers.....	8
IV. Proposal Contents	10
V. Terms and Conditions.....	10
VI. Proposal Signature Page.....	11
VII. Additional Documents.....	12
ATTACHMENT II – PROPOSAL EVALUATION CRITERIA	13
Selection Criteria	13
1. Compliance Review Criteria (pass/fail).....	13
2. Criteria for Alignment with RFP Objectives (pass/fail)	13
3. Technical Review Criteria	13
4. Cost Evaluation	15
5. Other Selection Factors	15
6. Oral Presentations	16
ATTACHMENT III – TECHNICAL PROPOSAL REQUIREMENTS.....	17
1. General Technical Volume Requirements:.....	17
2. Cover Page.....	18
3. Table of Contents	18
4. Technical Volume Description of Specific Content:	19
4.1 Executive Summary (Releasable to Public)	19

Research Partnership to Secure Energy for America

4.2 A. Technical Merit and Value to Program	20
4.3 B. Technical Approach	21
4.4 C. Technical and Management Capabilities.....	25
4.5 D. Cost Summary	25
ATTACHMENT IV - PROPOSAL SUBMISSION CHECKLIST.....	28

STATEMENT OF PROGRAM OPPORTUNITY

A. Background Information

The overall goal of the Unconventional Resources program element is to enhance both safety and environmental protection in the development of domestic natural gas and other petroleum resources.

A specific goal of the Unconventional Resources Program (UCR) is to unlock the vast resources of natural gas trapped within shale deposits across the nation while recognizing that an important part of the challenge currently facing producers is public concern for safety and protection of the environment. There is a need to demonstrate that the controls, safeguards, and environmental impact mitigation procedures put in place during drilling and production are commensurate with the associated risks.

Due to their potential significance and in view of the resources available to the research program, gas shales and tight gas sands are the primary focus for the program. Opportunities to leverage developed technologies through application to other unconventional natural gas and petroleum resources will be sought, and other petroleum resources may be specifically targeted in subsequent years

B. Program Objectives

The original objectives for the Unconventional Resources program were developed with input from the Program Consortium's unconventional onshore Program Advisory Committee (PAC). Over the course of the execution of the program, this input has been combined with information gathered during an ongoing series of efforts to identify and prioritize the technology challenges associated with the development of unconventional resources as reflected in RPSEA's 2011 draft Annual Plan. Additional input from the Unconventional Resources Technology Advisory Committee (URTAC) and other sources was also reflected in the Department of Energy's (DOE's) 2011 Annual Plan.

A critical objective of the Unconventional Resources program element is to develop the technology that will allow full realization of the tremendous potential of the domestic shale gas resource while addressing safety and environmental concerns important to the nation and to the communities located in areas of shale gas development. The list of topics in this solicitation is based on the 2011 Annual Plan, informed by other inputs that were anticipated in that Plan, such as the 90-day Report issued by the Secretary of Energy Advisory Board (SEAB) Natural Gas Subcommittee.

A basic principle of the program is to fund research, development and demonstration activities that would not be undertaken by industry in the absence of public funding. It is the intention of this solicitation to sponsor research and technology development that will provide broad public benefits through responsible development of additional domestic energy resources.

Research Partnership to Secure Energy for America

Statement of Program Opportunity

The program will continue the emphasis on integrated projects, with examples in the Eagle Ford and the Marcellus Shales, as anchor projects that will serve to focus program efforts on specific resources. While it is anticipated that the technologies developed through the program will be applicable to a wide range of shale and tight sand resources, a focus on specific resources will allow individual researchers to develop coordinated efforts addressing the key challenges associated with specific targeted resources. To the extent possible, integration of geologic concepts with engineering issues coupled to environmental and production issues is encouraged. The intent is to develop a coordinated program as opposed to individual projects such that the whole has much greater value than the sum of the parts.

C. Objectives for this Solicitation

In accordance with the 2011 Annual Plan, this solicitation is directed toward developing technology to address the concerns associated with shale gas development, with a view toward coordination with complementary efforts being undertaken within DOE, other Federal agencies, industry and other organizations.

The current portfolio has a strong focus on technologies that will enable more effective unconventional gas development through improvements in water management, well completion and stimulation technology, and better reservoir characterization methods, among other topics. While the 2011 program will build on previous research in these areas, especially as it relates to technologies that will enhance safety and decrease the environmental impact of unconventional gas exploration and production, a comprehensive program must address additional areas, including: demand for water for use in fracturing; protection of fresh water aquifers during hydraulic fracturing; development of more benign chemicals for use in hydraulic fracturing; environmental impacts resulting from the treatment and/or disposal of produced or fracturing flowback water; air quality impacts resulting from increased drilling, natural gas production, and truck transportation activity; and community issues surrounding high pressure fracturing operations in populated areas, including safety, noise, dust, traffic, stress on existing infrastructure, etc.

D. Scope

Proposals may be directed toward gas shale resources, tight gas resources, or both; however, they shall be directed toward one or more of the four topics described below and the specific topics to which they are addressed shall be identified in the proposal. The subtopics (a, b, c, etc.) listed within each of the four Topics below are intended to be examples of research areas that address that topic. Proposals are not limited to the areas described in the subtopics, as long as they address one or more of the four listed Topics.

- 1. Minimize surface disruption associated with unconventional gas development and disposal of associated wastes.**
 - a. Develop improved methods for reducing the site impact of drilling individual wells and increasing the reach associated with multiple wells drilled from a single pad, so that larger portions of a producing reservoir may be accessed from a given surface facility. Alternatively, develop improved stimulation methods to increase the producible volume of the reservoir associated with an individual well or develop methods to characterize subsurface properties so that subsurface zones with poor productivity are not drilled.

Research Partnership to Secure Energy for America

Statement of Program Opportunity

- b. Quantify and characterize constituents in waste streams resulting from drilling and production operations and develop technologies to treat them. Enhance best management practices for handling naturally occurring radioactive materials (NORM) and technologically enhanced NORM (NORM concentrated or exposed as a result of technological processes such as mining or waste water or sewage treatment).
 - c. Develop methods for treating, disposal, or recycling of solid waste material associated with unconventional gas development, including drill cuttings. Identify barriers to beneficial use of solid wastes and develop technological solutions to overcome these barriers.
- 2. Develop improved methods of protecting groundwater from contamination during shale drilling, casing, cementing, and production operations.**
- a. Review current best practices and develop improved methods in areas such as well control, casing, cementing, fluid management, and prevention of spills associated with drilling, completion, stimulation and production operations.
 - b. Develop technologies and methodologies to mitigate the risks to groundwater resources that may be associated with shale gas development.
 - c. Develop improved cement evaluation and pressure testing wireline tools for assuring casing and cementing integrity.
 - d. Accelerate the development of greener additives for stimulation and completion operations.
- 3. Maximize the efficiency of hydraulic fracturing operations to minimize environmental impact by minimizing total fluid requirement.**
- a. Develop improved approaches to control the size and orientation of the stimulated zone. Develop methods to increase the volume and permeability of the zone stimulated with a given amount of fracturing fluid.
 - b. Develop methods, processes and materials for use in hydraulic fracturing operations that minimize formation damage, improve stimulation effectiveness, and decrease the need for refracture treatments. This may include research to understand how fracture fluids and additives interact with the shale matrix.
- 4. Develop improved approaches for managing the fluids used in unconventional gas development. Make data from these research activities available for regulatory agencies to support informed decisions on promulgating sound science-based regulations.**
- a. Develop advanced technologies to improve fracturing water sourcing, handling, treatment, and disposal.
 - b. Develop alternative stimulation approaches that are effective but require less water use.
 - c. Develop technologies and methodologies for handling and disposal of large volumes of flowback water, as well as water that is produced during the longer term production phase.

Research Partnership to Secure Energy for America

Statement of Program Opportunity

- d. Evaluate options for water recycling and re-use, and barriers to more widespread use of these options. Develop methods and approaches to remove these barriers.

The research funded through this solicitation will be complementary to, but not duplicative of, other research being funded through industry, DOE, and ongoing RPSEA administered projects. Information regarding ongoing DOE and RPSEA projects can be found at the following web sites:

http://www.fossil.energy.gov/programs/oilgas/ultra_and_unconventional/program_publications.html

<http://www.rpsea.org/annual-plans/>

<http://www.netl.doe.gov/technologies/oil-gas/EPAAct2005/Projects/Index.html>

ATTACHMENT I – INSTRUCTIONS TO OFFERORS

RFP Summary

GENERAL:	
RFP.:	2011UN001
RFP Name:	RFP2011UN001
RPSEA Program:	Unconventional Onshore
Type of Contract:	Cost-Reimbursable-Cost Sharing
Level of RPSEA Funding:	Approximately \$35,000,000
Minimum Cost Share Requirement	20% for R&D Projects 50% for Demonstration Projects
IMPORTANT DATES:	
Date of RFP Issue:	December 20, 2011
Written Questions due regarding RFP:	21 days after RFP posting
Proposal Due Date and Time:	March 6, 2012 - 4:00 PM Central
Project Start Date:	Approximately October, 2012
AWARD INFORMATION:	
Expected Number of Awards:	8 to 15
Period of Performance:	Typical awards are expected to range between 1 and 2 years
PROPOSAL DELIVERY:	
Proposal Electronic Delivery Email Address:	RFP2011UN001@rpsea.org
Transmittal E-Mail Subject Line:	RFP2011UN001 – “ <i>Company Name</i> ”
PROPOSAL FORMAT:	
Page Limitations:	30 pages. Pages must have one and one half (1.5) line spacing for Technical Volume.
Special Format:	See Instructions to Offerors, Section III and Attachment III, Technical Proposal Requirements

Research Partnership to Secure Energy for America

Attachment I - Instructions to Offeror

I. General

Funding for the projects awarded in response to this solicitation is provided through the Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Resources Research and Development Program authorized by the Energy Policy Act of 2005 with funding from lease bonus and royalties paid by industry to produce oil and gas on federal lands. RPSEA is under contract with the U.S. Department of Energy's National Energy Technology Laboratory to administer the program. RPSEA is a 501(c)3 not-for-profit consortium with more than 175 members, including 22 of the nation's premier research universities, six national laboratories, other major research institutions, large and small energy producers and energy consumers. The mission of RPSEA, headquartered in Sugar Land, Texas, is to provide a stewardship role in ensuring the focused research, development and deployment of safe and environmentally responsible technology that can effectively deliver hydrocarbons from domestic resources to the citizens of the United States.

For more information on RPSEA and the Unconventional Resources Program, visit www.rpsea.org.

- A. **Offerors** are invited to submit technical proposals for Projects that will address the program opportunity identified in the Statement of Program Opportunity. The Technical Volume will include a Cost Summary which need not include hourly rates, indirect rates, overhead rates, or General and Administrative rates, but shall include the fully burdened costs associated with materials, equipment, labor, subcontracts, travel and any other costs for each year of the project. Only those offerors that DO NOT have a government approved cost accounting system may propose fully burdened fixed hourly rates developed exclusive of fee or profit and unallowable costs. Responsible and responsive Offeror(s) complying with all the provisions of the RFP will be evaluated for negotiations leading to a subcontract, provided the Cost Summary is reasonable and represents the best value to RPSEA and the Government. Offerors whose proposals are selected for negotiation will be required to submit the additional information described in Attachment I, Section VII within 30 days after notification of selection, prior to entering negotiations for a subcontract. RPSEA reserves the right to reject an offer from any person, entity or organization currently on the Government suspended or debarred list.
- B. **Eligibility** - In accordance with Title IX, Subtitle J, Section 999 of the [Energy Policy Act](#) (EPAAct 2005), in order to receive an award, an entity must either be a United States-owned entity organized under the laws of the United States; or an entity organized under the laws of the United States, that has a parent entity organized under the laws of a country that affords-
1. to United States-owned entities opportunities comparable to those afforded to any other entity, to participate in any cooperative research venture similar to those authorized under this subtitle;
 2. to United States-owned entities local investment opportunities comparable to those afforded to any other entity; and
 3. adequate and effective protection for the intellectual property rights of United States-owned entities.

Research Partnership to Secure Energy for America

Attachment I - Instructions to Offeror

- C. **Patent wavier request** - Department of Energy Acquisition Regulation Supplement (DEARS) provision 952.227-84 NOTICE OF RIGHTS TO REQUEST PATENT WAIVER is hereby incorporated and available upon request through this RFP.
- D. **Electronic Proposals** - Only electronic proposal submissions via email will be accepted. Facsimile or hard copy proposals will NOT be accepted, and will be deemed non-compliant if received.
- E. **Contact Information** - Proposals must list names, addresses, telephone numbers, and email addresses of people to whom RPSEA can direct technical and contractual questions.
- F. **No obligation**, either expressed or implied, exists on the part of RPSEA or the RPSEA Client to make an award for the work or for costs incurred in the preparation of any proposal(s) in response to this RFP.
- G. **Questions** – RPSEA has developed a general Frequently Asked Questions (FAQs) page on its web site that may be of benefit to Offerors when preparing their proposal. All Offerors are strongly encouraged to visit RPSEA’s FAQs during development of their proposal. In addition, Offerors are requested to review this Request for Proposal (RFP) carefully, without delay. Questions or comments specific to this RFP must be made in writing and received electronically via email by the RPSEA Contracts/Procurement Manager, Wiley Wells, no later than 21 days after the RFP is posted. Individuals who call on the phone will be instructed to submit their questions electronically. All questions and answers germane to the interpretation of RPSEA’s requirements for this RFP will be posted to the RPSEA web site. The questions and answers document will be located and accessed in the same area the RFP was located and accessed. It is imperative that potential Offerors continually check the RPSEA web site for any questions and answers, Amendments, RFP clarifications and/or requirement changes. Only the RPSEA Contracts/Procurement Manager, Wiley Wells, may issue clarification and directions concerning this RFP. Statements and interpretations by any other persons are invalid. **All inquires pertaining to this RFP will be in writing and directed to Wiley Wells by electronic mail at wwells@rpsea.org.**

II. Schedule

- A. **Proposal Due Date:** All proposal submissions are due 4:00 PM, Central Time, March 6, 2011. The Offerors are responsible for confirming receipt of their proposals. Offerors will receive an automated reply email indicating your proposal was received. Offerors are encouraged to submit proposals at least 24 hours prior to the due date and time to allow for electronic receipt processing. The email address for submissions will be unavailable to accept proposals after the due date and time. Offerors will receive an automated reply email indicating “delivery was refused,” if attempting to send a proposal after the due date and time. If you encounter transmission issues when emailing your proposals, call (281) 690-5507.
- B. **Project Start Date:** It is anticipated that all work will start October, 2012 .
- C. **Late/Non-responsive Offers:** Unless the RFP due date is extended, proposals will not be accepted by the electronic system after the due date and time. In the event a proposal is transmitted after the due date and time, it will be rejected immediately and not considered

Research Partnership to Secure Energy for America

Attachment I - Instructions to Offeror

in the evaluation process. All information required by the RFP (see Attachment I, Section IV) must be supplied in order to constitute a responsive Offer. Non-responsive offers will not be considered for award.

- D. **Post Award Kickoff Meetings** will be necessary and mutually arranged with the successful Offerors prior to commencing work for the purpose of arranging definitive schedules and to coordinate other actions as required. A kickoff meeting shall be accounted for in the Offerors cost proposal and is subject to negotiations.
- E. **Validity Period:** The Offeror's proposal shall remain valid for a minimum period of 180 calendar days from RPSEA's proposal due date.

III. Preparation of Offers

- A. **Electronic Format** - All information shall be electronically submitted. All documents with the exception of the Cost Summary, the Proposal Signature page, Resumes and Letters of Support for Cost Share shall be in Microsoft Word 97-2003 format (*.doc). Documents created using Office 2007 may be saved in Word 97-2003 format. The Cost Summary may be included in a Word document, but it must be submitted separately in Excel workbook format. The Proposal Signature page, Resumes and Letters of Support for Cost Share may be submitted in PDF format. Due to file size, some files may need to be compressed into "Zip" format to meet the email file size limitation.
- B. **Submission Address** - All submissions will be sent electronically to RFP2011UN001@rpsea.org. Subject line of email must include "RFP2011UN001 – Company Name"

Caution: There is a 20 megabyte size limitation on inbound emails. If the email and attachments exceed 20 megabytes in size, they shall be sent in two or more emails, sent separately, and identified as 1 of X, 2 of X, etc.. The Offeror shall include the volume name, and Company name on all documents. Cost Volume, or Technical Volume, and Company name, shall be included as "footer" to the corresponding and appropriate documents of your proposal. The Offeror must make the document content explicitly clear to RPSEA by titling attached documents, numbering each page of the documents, and ensuring subject lines of emails include the RFP Number.

CHECK WITH YOUR INTERNAL IT DEPARTMENT FOR ANY SIZE LIMITATIONS OF ATTACHMENTS YOUR EMAIL SERVER MAY ENFORCE.

- C. **Identification** - All offers must include the RFP number 2011UN001
- D. **Taxes** - The price offered must be inclusive of all applicable Federal, State, and Local taxes.
- E. **D-U-N-S Number** - (Data Universal Numbering System) The Offeror shall provide its D-U-N-S number as part of the proposal. Should the Offeror not have a D-U-N-S number, then so indicate in the proposal. The Offeror is encouraged to secure such a number. A D-U-N-S number must be secured prior to award of a RPSEA subcontract. A D-U-N-S number can be

Research Partnership to Secure Energy for America

Attachment I - Instructions to Offeror

obtained from Dun & Bradstreet, www.dnb.com. Normal processing time to obtain a D-U-N-S number is 48 to 72 hours and is free of charge.

- F. **Proprietary Data** - RPSEA anticipates it may receive proprietary data. If proprietary data is included in a proposal, it must be clearly marked as described below. RPSEA will maintain the proprietary data in confidence, giving it the same degree of care as RPSEA would exercise with its own proprietary data. Proprietary data should be included in a proposal only when such information is necessary to convey an understanding of the proposed project. The use and disclosure of such data may be restricted, provided the Offeror includes the following legend on the first page of the project narrative and specifies the pages of the proposal which are to be restricted:

"The data contained in pages _____ of this proposal have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this Offeror receives an award as a result of or in connection with the submission of this proposal, RPSEA shall have the right to use or disclose the data herein to the extent provided in the award."

To protect such data, each line or paragraph on the pages containing such data must be specifically identified and marked with a legend similar to the following:

"The following contains proprietary information that (name of Offeror) requests not be released except for purposes of review and evaluation."

- G. **Liability** - The Offeror shall hold the U.S. Government, RPSEA, RPSEA's client, its officers, agents, servants, and employees, harmless from liability of any nature or kind because of use of any copyrighted, or un-copyrighted compositions; secret process, patented or unpatented invention; articles or appliances furnished or used under this Offer, and, unless otherwise determined by the U.S. Government, agrees to defend, at Offeror's expense, any and all actions brought against the U.S. Government, RPSEA, RPSEA's client, or itself because of the unauthorized use of such articles.
- H. **Gratuities** - By acknowledgment of response to this RFP, the Offeror hereby certifies that no gratuities were offered by the Offeror or solicited by any RPSEA employee either directly or indirectly. Any situation where a gratuity is solicited shall be reported immediately to the RPSEA Contracts/Procurement Manager, Wiley Wells, at 281-690-5504.
- I. **Signature** - An individual authorized to legally bind the Company/Organization shall sign all offers/proposals. This may be a digital signature or the image of a scanned signature on the respective form or page.
- J. **Hyperlinks** - This RFP contains hyperlinks to other documents within RPSEA's web site and to the World Wide Web. If you are unable to click and get to the hyperlink, go to www.rpsea.org to download and complete the required attachments for your proposal.

Research Partnership to Secure Energy for America

Attachment I - Instructions to Offeror

IV. Proposal Contents

The Offeror's proposal shall include:

- A. Technical Volume (see Attachment III)
- B. Executive Summary File (see Attachment III)
- C. Signed Proposal Signature Page (Section VI of Attachment I)
- D. Exceptions (see next paragraph V. Terms and Conditions)

Completeness - All information required by the RFP must be supplied in order to constitute a responsive Offer. Non-responsive offers will not be considered for award.

V. Terms and Conditions

Submission of a proposal indicates the Offeror's willingness to accept the terms and conditions of the Sample Subcontract Schedule A and its attachments and, Schedule B, unless specific exceptions are taken. Submit a summary of any exceptions taken on a separate attachment to your proposal titled "Exceptions". These documents can be downloaded from the RPSEA web site using the links below. The Offeror shall indicate any Provisions of the Sample Subcontract to which the Offeror takes exception. The Offeror is cautioned however that failure to accept the terms and conditions may result in unacceptable delays in award of a subcontract, which could result in the rejection of a proposal.

Any prospective subcontract is subject to the following Terms and Conditions with Attachments that can be downloaded from the RPSEA web site via the following links:

[Sample Subcontract](#)

The Offeror shall indicate any Provisions of the Sample Subcontract to which the Offeror takes exception, at the time of proposal submission.

The full text of the Government Federal Acquisition Regulations (FAR) and Department of Energy Acquisition Regulations Supplement (DEARS) clauses contained in Schedule B Part I, and Part II, can also be located on the internet at: <https://www.acquisition.gov/Far/> and at: <http://farsite.hill.af.mil/vfdoe1.htm>.

NOTE: Inside the sample subcontract, Schedule B Part I, and Schedule B Part II, are mandatory Flow Down clauses from the RPSEA Prime Contract with Department of Energy (DOE) and are not negotiable.

Research Partnership to Secure Energy for America

Attachment I - Instructions to Offeror

VI. Proposal Signature Page

The undersigned Offeror declares she/he has carefully examined the Program Opportunity Statement of Work, General Provisions of this RFP, and has taken no exceptions to the Terms and Conditions contained in Schedule B, Part I, or Schedule B, Part II of the Sample Subcontract.

Dated this _____ day of _____, 2012

Submitted by:

Name of Offeror: _____

Address of Offeror: _____

Phone: _____ Fax: _____

Authorized Signature: _____

Printed Name: _____

Title: _____

Research Partnership to Secure Energy for America

Attachment I - Instructions to Offeror

VII. Additional Documents

If selected for negotiations leading to a subcontract, the Offeror will be required to complete a Cost/Price Volume in accordance with the [Instructions for Preparation of Cost/Price Volume](#) that can be downloaded from the RPSEA web site. The Offeror will have 30 days from the date of the notification of selection to submit the Cost/Price Volume and other Additional Documents as required. The Offeror will provide supporting documentation to show the basis of estimate for each cost element in the Cost/Price Volume. If a Cost/Price Volume is not submitted within 30 days, RPSEA reserves the right to terminate negotiations.

In addition to the required submittals for this RFP, the following standard contract documents the Offeror will be required to complete if selected for negotiation can be found on the RPSEA web site at www.rpsea.org - "Business with RPSEA" – "[Standard Contract Documents](#)".

While NOT required to be submitted with the proposal, if selected for negotiation, Offerors will be required to download and complete the following documents as applicable:

1. [Government Property Questionnaire](#)
This Questionnaire will be required before a RPSEA subcontract is awarded.
2. [Annual Representations & Certifications](#)
This Certification will be required before a RPSEA subcontract is awarded.
3. [Cost Accounting Standard \(CAS\) Certification](#)
This Certification is required to be signed and returned if the dollar value of the proposal exceeds \$650,000.
4. [Standard subcontracting plan](#)
A subcontracting plan is required if the dollar value of the proposal exceeds \$550,000.
5. [Representations and Certifications Part D, Department of Energy](#)
This Certification must be signed and returned if the dollar value of the proposal exceeds \$100,000.
6. [DOE Environmental Questionnaire](#)
This form will be required before award of a subcontract.

ATTACHMENT II – PROPOSAL EVALUATION CRITERIA

Selection Criteria

1. Compliance Review Criteria (pass/fail)

RPSEA will perform an initial Pass/Fail compliance review to determine that

- the Offeror is eligible for an award as determined by the EAct Law;
- the Offer is responsive to the RFP requirements; and
- the Offeror has satisfied all mandatory RFP requirements.

Detailed information regarding these requirements is found in Attachment I of this document [“Instructions to Offeror”](#).

2. Criteria for Alignment with RFP Objectives (pass/fail)

RPSEA will perform a review to identify any proposals that are not responsive to the objectives of the RFP. Subject to approval by DOE, such proposals will not receive further evaluation. A one page public abstract summarizing the objectives of the proposal will be reviewed to evaluate alignment with the objectives of the RFP.

3. Technical Review Criteria

Proposals submitted in response to this RFP will be evaluated and scored in accordance with the criteria and weights listed below. Evaluators will assign a number between 0 and 10 to each of the three criteria listed below, based on the extent to which the proposal addresses the evaluation factors listed for each criterion. These values are applied against the weight assigned to each evaluation criteria. For example, a particular criterion has been assigned a numerical weight of 40 percent. If the Offeror fully addressed all listed factors associated with that criterion, demonstrates that it will meet performance requirements, and contains no weaknesses, then that criterion shall be assigned the number ten (10). That number would be multiplied by the weight (40) to yield a score of 400 for that criterion. A perfect technical score for a proposal would be 1000.

3.1 Criterion 1 - Technical Merit and Value to Program – 50%

- The significance of the problem being addressed and the degree to which it contributes toward an integrated approach to the development of the targeted resources in accordance with the objectives of this RFP. Proposals that integrate the results of projects across disciplines to address the technical needs associated with a specific resource will be scored higher.
- Limitations in existing knowledge or technologies being addressed by the RFP, and the extent to which sound scientific and engineering principles are applied to expand relevant scientific and technical capabilities beyond the current state-of-the-art.
- The extent of participation and support from producers and/or service companies that would be responsible for investing in the application of the proposed technology.

Research Partnership to Secure Energy for America

Attachment II – Proposal Evaluation Criteria

- The anticipated benefits and potential impact of the proposed work in terms of increasing reserves and production or decreasing environmental impact, and the extent to which those potential benefits are articulated and quantified.
- The extent to which personnel, equipment, data, operations, additional funding, and other resources are leveraged to provide additional value to the program. The nature and amount of proposed cost sharing are an important element of this criterion.
- The market applicability of the information or technology/methodology being proposed and the degree to which a commercialization path has been defined and planned.
- The degree to which the Applicant demonstrates that the proposed research is not presently being conducted by another entity or demonstrates that the proposed research makes significant advances to current research or current state of technology, knowledge or capabilities.
- The degree to which the Applicant demonstrates the likelihood that the proposed research will not be undertaken by industry in the near term (within about the next two (2) years) absent Federal funding.
- The risks or factors affecting the likelihood that the project will be successful.

3.2 Criterion 2 – Technical Approach – 25%

- The adequacy and feasibility of the Offeror’s work plan (Statement of Work) to achieve the stated research objectives.
- The extent to which the concept, design, methods, analyses, and technologies are properly developed, well-integrated, and consistent with the goals of the project.
- The adequacy of the proposed project; staffing plan for each task (labor hours and mix), reasonableness and logical progression of the proposed project schedule, and appropriateness of planned travel.
- The degree to which both appropriate technical and schedule critical path milestones are clearly identified and defined in the proposal, and the likelihood that these milestones will be successfully met based on the proposed technical approach.
- The adequacy of the technology transfer plan leading to commercialization or utilization of the developed technology or knowledge by industry.

3.3 Criterion 3 – Technical and Management Capabilities – 25%

- Capabilities and experience (technical and managerial) of the organizations involved in managing projects of similar type, size and complexity; including demonstrated corporate experience of the Offeror and participating organizations in the managing of projects that meet project objectives within budget and on schedule.
- The likely effectiveness of the organization, including subcontractors, to successfully complete the currently proposed project.
- Credentials (technical and managerial) of key personnel assigned to the project, including the likelihood that the proposed work can be accomplished by the investigators and technical staff given their experience and expertise.
- The adequacy and availability of the personnel, facilities and equipment to perform project tasks.

Research Partnership to Secure Energy for America

Attachment II – Proposal Evaluation Criteria

4. Cost Evaluation

Cost will be a factor in selecting a portfolio of projects that maximizes the probability of meeting program goals. Technical reviewers will be asked to provide cost realism of the labor categories and hours, as well as the other costs submitted for the proposed work, as documented in the Cost Summary. RPSEA's objective is to award subcontracts for superior technical proposals that represent the best value to RPSEA and the Government. However, RPSEA will not make an award at a price premium it considers disproportionate to the benefits associated with the evaluated technical superiority of one proposal over another. Cost/price information contained in the proposal will be an important factor in RPSEA's consideration for an award and will be given slightly less consideration than the technical merit of the proposal.

5. Other Selection Factors

Additional factors, while not an indicator of the Offeror's merit, e.g., technical excellence, cost, ability, etc., may be essential to the process of selecting the proposal(s) that will best achieve the program objectives. Since the objective of the program involves the development of technology that will enable the safe and environmentally responsible development of new unconventional gas resources, a high priority will be assigned to the selection of a portfolio of projects that form an integrated approach to addressing the technology challenges associated with one or more specific resources. The program policy factors listed below may be used to construct an integrated portfolio, either through the selection of proposals that take an integrated approach to a specific resource, or the selection of complementary individual projects that form the basis of an integrated program. Offerors should recognize that some very good proposals may not receive an award because they do not fit within a mix of projects which maximizes the probability of achieving the program's overall research and development objectives. Therefore, the following Program Policy Factors may be used to assist in determining which of the ranked proposal(s) shall receive funding support:

- It may be desirable to select for award a group of projects which represents a diversity of technical approaches and methods.
- It may be desirable to support complementary and/or duplicative efforts or projects, which, when taken together, will best achieve the research goals and objectives.
- In order to maximize the impact of the overall portfolio of projects, it may be desirable to select projects which create particular synergies with projects already ongoing within the RPSEA unconventional resources program element.
- Selection of less technically merited project(s) for award may be more desirable than another project(s) if such a selection will optimize the use of available funds by allowing the selection of a portfolio of projects likely to best achieve program goals.
- It may be desirable, because of the nature of the energy source, the type of projects envisioned, or limitations of past efforts, to select for award a group of projects with a broad or specific geographic distribution.
- The program is constrained to supporting only research that will not be undertaken by industry in the near term (within about the next two (2) years) absent Federal funding.

Research Partnership to Secure Energy for America

Attachment II – Proposal Evaluation Criteria

While this criterion is scored in the technical review, an otherwise high-scoring proposal that cannot clearly meet this criterion will not be funded.

- In order to ensure a timely and effective contribution to meeting program goals, the past performance of a contractor may be considered. A less technically merited proposal may be selected for award if a proposal with higher technical merit is submitted by a contractor that has in past RPSEA or DOE projects failed to submit deliverables and respond to requests in a timely fashion, or in other ways performed such that the likely delivery of the proposed work in a timely and professional fashion may be in doubt.

The above factors will be independently considered in determining the optimum mix of proposals that will be selected. These policy factors will provide RPSEA with the capability of developing, from the competitive RFP, a broad involvement of organizations and organizational ideas, which both enhance the overall technology research effort and upgrade the program content to meet the program goals.

6. Oral Presentations

Oral presentations may, at RPSEA's discretion, be required to determine selection for proposals valued at over \$2,000,000 of RPSEA funding. Oral presentations are not in lieu of the submission of written proposals.

ATTACHMENT III – TECHNICAL PROPOSAL REQUIREMENTS

The Technical Volume **must not exceed 30 one and one half line (1.5) spaced pages, in 11 point or larger font**. The 30 page limit must include all sections described below, as well as any additional technical reference lists, charts, graphs, maps, photographs, and other pictorial presentations, when printed using standard 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right).

THAT PORTION OF THE TECHNICAL VOLUME EXCEEDING THE 30 PAGE LIMIT WILL NOT BE REVIEWED.

Resumes and Letters of Support for Cost Share are to be included in an Appendix to the Technical Volume and will not be included in the page limit. (These documents may be submitted in PDF format.)

Proposals should be simple and concise. Art work, graphics and pictures will increase the document file size and should only be used where important for the proposal. See Attachment I - Instructions for Offerors, Section III (F) above, for instructions on how to mark proprietary information.

1. General Technical Volume Requirements:

- The Offeror shall address the technical and management aspects of the proposed work, the Offeror’s capabilities and what the Offeror will do to satisfy the requirements of the RFP.
- The presented technical information shall be specific and sufficient to allow evaluation of the proposal. Only the technical information contained in this section will be evaluated to determine such matters as understanding of the work to be performed, technical approach and potential for completing the desired work.
- The Technical Volume shall contain all of the information required to fully evaluate the proposal with respect to the Proposal Evaluation Criteria found in Attachment II. This will help facilitate the review process and ensure maximum consideration of the proposal’s merit.
- The Technical Volume should be practical, straightforward, concise and prepared simply and economically.
- The Technical Volume must include a cost summary, using the included [Cost Summary Form](#). The cost summary included in the Technical Volume need not include hourly rates, indirect rates, overhead rates, or General and Administrative rates, but shall include the fully burdened costs associated with materials, equipment, labor, subcontracts, travel and any other costs for each year of the project. Section D below provides a more complete description of the required Cost Summary.
- **Offerors must follow the Technical Volume format described below, including the detailed Table of Contents.** Use of a uniform format facilitates the review process and ensures that the Offeror will address the merit review criteria.

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

2. Cover Page

The cover page may be organized in any fashion chosen by the Offeror, but must include:

- a) RFP Number
- b) Title of Project
- c) Name of Offeror (Prime contractor)
- d) Names of Offeror’s subcontractors and other participants
- e) Prime contractor’s technical point of contact name, phone number, and email
- f) Prime contractor’s contractual point of contact name, phone number, and email

Both the technical and contractual contacts for the prime contractor will be notified whether or not the proposed project is selected for RPSEA funding.

The cover page shall also identify the Area(s) of Interest from the Statement of Program Opportunity under which the proposal is submitted.

3. Table of Contents

	<u>Page</u>
Table of Contents	#
List of Acronyms	#
Public Executive Summary	#
A. TECHNICAL MERIT AND VALUE TO PROGRAM	
A.1 Proposed Technology/Methodology	
A.1.1 Statement and Significance of the Problem	#
A.1.2 Background and Existing Technologies/Methodologies.....	#
A.1.3 Relationship to the Program Goals/Objectives	#
A.2 Industry Participation and Support	
A.2.1 Description of Industry Participation.....	#
A.2.2 Leverage of Project Funds.....	#
A.2.3 Source and Nature of Proposed Cost share.....	#
A.3 Expected Impacts and Benefits	
A.3.1 Impact on Reserves and Production.....	#
A.3.2 Environmental Impact	#
A.3.3 Applicability	#
A.3.4 Likelihood of Industry Undertaking R&D	#
A.3.5 Risks	#
B. TECHNICAL APPROACH	
B.1 Detailed Work Plan (Statement of Work).....	#
B.2 Project Schedule and Milestones	#
B.3 Proposed Travel	#
B.4 Recommended Technology Transfer Approach	#

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

C.	TECHNICAL AND MANAGEMENT CAPABILITIES	
C.1	Organizational Capabilities and Experience.....	#
C.2	Qualifications of Key Personnel	#
C.3	Quality and Suitability of Facilities, Equipment and Materials.....	#
D.	COST SUMMARY	
D.1	Proposal cost/price summary	#

APPENDIX – Additional information not included in page limit

Resumes

Letters of support and/or other information regarding cost share

4. Technical Volume Description of Specific Content:

The Technical Volume shall be presented in the format of the preceding Table of Contents. As specified in the Attachment I - Instructions to Offerors, the entire Technical Volume, including the Cover Page, Table of Contents, List of Acronyms, Public Executive Summary, Technical References and Proposal is limited to 30 pages. Resumes are not included in the page limit. The Technical Volume shall be presented in as much detail as practical and include the following technical information:

4.1 Executive Summary (Releasable to Public)

The Executive Summary must contain a summary of the proposed activity suitable for dissemination to the public. This document must not include any proprietary or sensitive business information as RPSEA may make it available to the public. The project summary shall be approximately one to two pages. While the Executive Summary shall be included as part of the Technical Proposal, a separate computer file containing ONLY the Executive Summary must be submitted along with other proposal documents.

The Executive Summary shall be a self-contained document that identifies:

- the name of the Offeror (prime contractor),
- the project director/principal investigator(s),
- the project title,
- the project duration, in months,
- the specific Topic from the Statement of Program Opportunity addressed by the proposal (Minimize surface disruption, Protect groundwater from contamination, Maximize efficiency of hydraulic fracturing, or Manage fluids used in unconventional gas development),
- the objectives of the project,
- a description of the project, including methods to be employed,
- key deliverables associated with the project,
- the potential impact of the project (i.e., benefits, outcomes),
- other participants involved in performing the scope of work,

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

- organizations providing the required cost share.

4.2 A. Technical Merit and Value to Program

In this section, the Offeror shall provide detailed information as outlined in the preceding table of contents that will allow the reviewers to score the proposal based on Criterion 1 identified in Attachment II.

A.1 Proposed Technology/Methodology - The Offeror shall discuss the significance of the problem addressed by the proposal and its relevance to the Program Objectives (Statement of Program Opportunity, Section B). This section shall briefly discuss the proposed technology, the limitations of current technology/information and how the proposed project will address them. The Offeror shall discuss any ways in which the proposed work builds upon or creates synergies with ongoing projects within the RPSEA unconventional resources program element. Any Intellectual Property (IP) considerations that will influence the conduct or application of the proposed research shall be discussed in this section. In particular, Offerors shall identify any background IP required for the scope of work and specify who controls such IP.

A.2 Industry Participation and Support - The Offeror shall describe the extent to which the companies that will eventually be investing in the proposed technology/methodology are participating in the proposed project. This documentation may be in the form of a description of any role such companies may have in the proposed project, letters of support, or proposed cost share. Any additional support that leverages project funds shall be described, such as personnel time and access to equipment, data, or facilities. The source and nature of all proposed cost share shall be described.

Copies of letters of support, letters of commitment, or details of co-funding agreements will be included as a separate appendix not to count in the 30 page Technical Volume limit.

A.3 Expected Project Impacts and Benefits - The Offeror shall discuss and attempt to quantify, where applicable:

- The potential impact of the proposed technology/methodology on oil and gas production/reserves from the targeted resources,
- Potential environmental impacts of the proposed technology/methodology,
- The market applicability of the technology/methodology being proposed (i.e., is the product of the proposed work restricted to certain localities or conditions, what industry segment the project is addressing, how results will be applied),
- The appropriate path to application of the proposed technology/methodology,
- The risks or factors affecting the likelihood of the project achieving the proposed impacts and the likelihood of market acceptance, including information on the scientific and engineering challenges to developing the new technology/methodology, and
- Detailed and concise information regarding the reasons why the proposed research would not be undertaken by industry, including service companies, academia, technology developers, etc., in the near term (within about the next two (2) years) absent Federal funding. Since a proposal cannot be funded unless it meets this criterion, the Offeror should

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

make a compelling argument for why the proposal requires Federal Funding for the work to be undertaken in the near term.

It is anticipated that the Impact and Benefits discussion will be more detailed and quantitative for projects nearer to application than that for early-stage projects. However, even proposals for early-stage projects shall describe a potential path to application and the associated benefits, assuming some set of positive results associated with the proposed work. This discussion will provide the starting point for the quantitative benefits assessment that will be accomplished as selected projects evolve.

4.3 B. Technical Approach

In this section, the Offeror shall provide detailed information as outlined in the preceding Table of Contents that will allow the reviewers to score the proposal based on Criterion 2 identified in Attachment II.

B.1 Detailed Work Plan (Statement of Work) – The Technical Volume must contain a single, detailed Work Plan that addresses how the proposed project meets the Solicitation Objectives as stated in the Statement of Program Opportunity. The Detailed Work Plan shall follow the structure discussed below. It shall include a concise summary of the project objectives and technical approach specifically for each Task and, where appropriate, for each subtask. All activities to be completed during project performance shall be addressed.

RPSEA recommends that the **Statement of Work be kept to approximately 8-10 pages within the Technical Volume’s 30-page limit.**

Offerors shall prepare the Statement of Work in the following format:

TITLE OF WORK TO BE PERFORMED

(Insert the title of work to be performed. Be concise and descriptive.)

I. OBJECTIVES

Include one paragraph on the overall objective(s) of the work. Also, include objective(s) for each phase of the work.

II. SCOPE OF WORK

This section shall summarize the effort and approach to achieve the objective(s) of the work for each Phase. The material supplied in this section shall serve as a concise summary of the actual work to be performed.

III. TASKS TO BE PERFORMED

Note that RPSEA has identified three specific tasks that the Offeror is required to insert into the Statement of Work as Tasks 1, 2 and 3.

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

Tasks, must be concisely written, and provide logical sequence. Tasks must be divided into the phases of the project. The description of each task must include the specific deliverables associated with that task. This section provides a brief summary of the planned approach to this project.

PHASE I

Task 1.0 -- Project Management Plan (due 30 days after Project Kick-off)

Note: This Task is not required for projects funded at less than \$100,000 with a duration of less than six (6) months.

After Award, the SUBCONTRACTOR shall develop a work breakdown structure and supporting narrative that concisely addresses the overall project as set forth in the subcontract. The SUBCONTRACTOR shall provide a concise summary of the objectives and approach for each Task and, where appropriate, for each subtask. The SUBCONTRACTOR shall provide schedules and planned expenditures for each Task including any necessary charts and tables, and all major milestones and decision points. The SUBCONTRACTOR shall identify key milestones that need to be met prior to project proceeding to the next phase. This report is to be submitted within thirty (30) days of the Project Kick-off Meeting. The RPSEA Project Manager shall have twenty (20) calendar days from receipt of the Project Management Plan to review and provide comments to the SUBCONTRACTOR. Within fifteen (15) calendar days after receipt of RPSEA's comments, the SUBCONTRACTOR shall submit a final Project Management Plan to the RPSEA Project Manager for review and approval.

The report's format and details shall be developed with the RPSEA Project Manager's input upon Award. The length and complexity of the Project Management Plan will depend upon the scope, timing and cost of the proposed work. The description of Task 1.0 provided in the proposal shall consist of the following language:

"The SUBCONTRACTOR shall develop a Project Management Plan consisting of a work breakdown structure and supporting narrative that concisely addresses the overall project as set forth in the subcontract. The SUBCONTRACTOR shall provide a concise summary of the objectives and approach for each Task and, where appropriate, for each subtask. The SUBCONTRACTOR shall provide schedules and planned expenditures for each Task including any necessary charts and tables, and all major milestones and decision points. The SUBCONTRACTOR shall identify key milestones that need to be met prior to project proceeding to the next phase. The report is to be submitted within thirty (30) days of the Project Kick-off Meeting. The RPSEA Project Manager shall have twenty (20) calendar days from receipt of the Project Management Plan to review and provide comments to the SUBCONTRACTOR. Within fifteen (15) calendar days after receipt of the RPSEA's comments, the SUBCONTRACTOR shall submit a final Project Management Plan to the RPSEA Project Manager for review and approval."

Task 2.0 --Technology Status Assessment (due 30 days after Project Kick-off)

After Award, the SUBCONTRACTOR shall perform a Technology Status Assessment and submit a summary report describing the state-of-the-art of the proposed technology. The report shall include both positive and negative aspects of each existing technology. The report shall be no more than eight (8) typewritten pages in length. The report is not to contain any proprietary or

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

confidential data, as the report will be posted on the RPSEA web site for public viewing. The report is to be submitted within thirty (30) days of the Project Kick-off Meeting.

The report shall contain the following:

Current state of technology (Note: Industry wide, not strictly the Offeror's technology)

- Summary of Background of Industry/Sector
- Technologies/Tools Being Used
- Benefits and Inadequacies of Current Technology

Development Strategies

- Why New Technology and Research is Required?
- Problems to Address in this Research Project

Future

- What Barriers will the Research Overcome and what is the likely Impact on the U.S. Domestic Gas Supply and the Environment?
- Deliverables – Tools, Methods, Instrumentation, Products, etc.

References (relevant and used in the assessment report)

The description of Task 2.0 provided in the proposal shall consist of the following language:

"The SUBCONTRACTOR shall perform a Technology Status Assessment and submit a summary report describing the state-of-the-art of the proposed technology. The report shall include both positive and negative aspects of each existing technology. The report shall be approximately three to eight typewritten pages in length. The report is not to contain any proprietary or confidential data, as the report will be posted on the RPSEA web site for public viewing. The report is to be submitted within 30 days of the Project Kick-off Meeting."

Task 3.0 --Technology Transfer (due 30 days after Project Kick-off)

Section 999C(d) of EAct 2005 requires that 2.5% of the total project cost (including cost share) be designated for technology transfer. As the exact mechanisms that will provide for most effective technology transfer at both the project and program level are not known at the inception of each research project, 2.5% of the proposed total project cost shall be designated for a Technology Transfer task. The details of the technology transfer program and the associated funding mechanism will be determined at an appropriate point in the program cycle. The expenditure of these funds will be as directed by RPSEA, subject to award approval by NETL.

One means of evaluating the impact of the proposed work and the effectiveness of technology transfer will be through the quantitative estimation of program benefits in terms of incremental reserves, production and other factors. As part of this task, the Awardee will be expected to provide, upon request by RPSEA, information to support the evaluation of program benefits.

This solicitation requires that the Offeror provide an Approach to Technology Transfer in section B.4 of the proposal. RPSEA will evaluate section B.4 with total Program objectives in mind. While the unique nature of each project may require a distinct approach to technology transfer, the Offeror shall expect that at least 40% of the technology transfer funds (1% of total project

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

cost) may be directed to a third party to be selected by RPSEA to support the conduct of activities such as workshops, seminars and demonstrations. It should also be noted that not all subcontracts may have the same percentage of the 2.5% set aside for technology transfer by a third party, as that determination will be made based upon the nature of each individual project.

The description of Task 3.0 in the proposal shall consist of the following language:

"SUBCONTRACTOR shall work with RPSEA throughout the project to develop and implement an effective overall Technology Transfer program. Technology Transfer activities will consist of both project and program level activities amounting to not less than 2.5% of the total cost of the project. The total cost of the project is the value of funds provided by RPSEA plus the value of SUBCONTRACTOR'S cost share. SUBCONTRACTOR shall nominate work/activities for 1.5% of the total cost for project level technology transfer activities. This work/activities may typically include writing technical papers and, as appropriate, participation in agreed to conferences and workshops. RPSEA will reserve 1% of the total cost for program level technology transfer activities. Project level Technology Transfer Plans will be submitted to RPSEA within thirty (30) calendar days of the Project Kick-off Meeting. Technology transfer activities will also be detailed in the Project Management Plan. SUBCONTRACTOR will report the cost associated with project level technology transfer activities on each monthly report. DOE periodically will request information from SUBCONTRACTOR through RPSEA for the purposes of estimating or evaluating the benefits of the program and for review of Project Summary Sheets, newsletter articles and project status and successes. SUBCONTRACTOR shall provide information requested by RPSEA to support DOE's quantitative estimation of program benefits."

The preceding tasks are all mandatory for every proposal. The following tasks will describe the Offeror's proposed project.

Task 4.0 (Title)

- Subtask 4.1 (Description)
- Subtask 4.2 (Description)

Task 5.0 - (Title)

- Subtask 5.1 (Description)
- Subtask 5.2 (Description)

PHASE II (Optional)

Task 6.0 - (Title)

- Subtask 6.1 (Description)
- Subtask 6.2 (Description)

B.2 Project Schedule and Milestones

- The Offeror shall provide a Gantt chart showing project schedule and milestones, and describe the interrelationships of the project tasks. The chart shall clearly identify the time after project initiation that each Task or project phase begins and ends.
- Narrative shall include all significant milestones and identify any key milestones that need to be met prior project proceeding to the next phase.
- Discuss any anticipated problems that could affect project schedule or milestones, along with possible solutions.

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

B.3 Proposed Travel

- The Offeror shall provide an explanation for all proposed travel.
- The purpose of the trip, number of trips, the origin and destination, trip duration, and the number of personnel shall be included in the explanation.

B.4 Approach to Technology Transfer – The Offeror shall describe a preferred approach to technology transfer, including how results of the proposed work might be made available to the research community, the targeted industry segment, and to the greater natural gas community. The approach submitted by the Offeror will assist RPSEA in planning the technology transfer efforts to be funded under Task 3 of the Statement of Work.

4.4 C. Technical and Management Capabilities

In this section, the Offeror shall provide detailed information as outlined in the preceding table of contents that will allow the reviewers to score the proposal based on Criterion 3 identified in Attachment II.

C.1 Organizational Capabilities and Experience – The Offeror shall provide organizational capabilities and experience (both technical and managerial) in managing technical projects of a similar nature and complexity.

- The Offeror shall provide information and examples that demonstrate its ability to successfully develop products (tools, components, software, reports) within scope, budget, and schedule of the project.

C.2 Qualifications of Key Personnel – The credentials, capabilities, experience (technical and managerial) and availability of the key personnel to be assigned to the project shall be provided.

- The roles of key personnel and the percentage of time being devoted to the project shall be clearly identified.
- Resumes of key project personnel shall be appended to the Technical Volume, but will not be included in the 30 page limit. Each individual resume shall be no more than three pages in length and shall include only the most relevant and recent publications.

C.3 Quality and Suitability of Facilities, Equipment, and Materials – Information shall be provided on the facilities and equipment needed to perform the proposed research and whether or not this equipment is available or needs to be purchased.

4.5 D. Cost Summary

Cost will be a factor in selecting a portfolio of projects that maximizes the probability of meeting program goals. RPSEA's objective is to award subcontracts for superior technical proposals that represent the best value to RPSEA and the Government. The information supplied in the Cost Summary will be evaluated as a guide to determine the Offeror's understanding of the requirements of the RFP and to assess the validity of the Offeror's approach to performing the proposed work.

The Cost Summary shall be completed using the included [Cost Summary Form](#). The Cost Summary need not disclose hourly rates, indirect rates, overhead rates, or General and Administrative rates, but shall include the fully burdened costs associated with materials,

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

equipment, labor, subcontracts, travel and any other costs for each year of the project. The Total Cost to Execute the Scope of Work shall include all costs associated with cost-shared activities, as well as costs to be funded by RPSEA. The Cost Summary shall include the Total Cost to Execute the Scope of Work, the Cost Share Amount, and the RPSEA Funding Requested on a cost reimbursable proposal, broken down by project year. The RPSEA Funding Requested shall equal the difference between the Total Cost to Execute the Scope of Work and the Cost Share Amount. The following link provides access to a spreadsheet version of the [Cost Summary Form](#).

Note that if a project has multiple phases, the cost share requirements will be applied separately to each phase. For example, a two phase project where Phase I is R&D and Phase II is a demonstration project will require 20% cost share for Phase I and 50% cost share for Phase II.

Research Partnership to Secure Energy for America

Attachment III, Technical Proposal Requirements

Cost Summary Form				
<p>It is expected that, in order to complete this form, you will need to do a complete cost estimate including application of appropriate overhead and indirect rates. While we do not require complete cost documentation in the initial proposal, projects selected for funding will be asked to provide complete documentation of the proposed cost in a Cost Volume. Please complete this form based on your estimate of the costs required to execute the proposed scope of work. The information in this Cost Summary will be shared with the technical reviewers of your proposal. The information supplied in this Cost Summary, and later documented in a complete Cost Volume, will form the basis of subcontract negotiations for selected proposals.</p>				
	Year 1	Year 2	Year 3	Total
Materials (enter fully burdened dollar amount)	\$	\$	\$	\$
Equipment (enter fully burdened dollar amount)	\$	\$	\$	\$
Labor hours (enter person-hours for each labor category)				
<i>Labor Category 1</i>				
<i>Labor Category 2</i>				
<i>Etc.</i>				
Total cost of labor (enter fully burdened dollar amount)	\$	\$	\$	\$
Subcontracts (enter fully burdened dollar amount)	\$	\$	\$	\$
Travel (enter fully burdened dollar amount)	\$	\$	\$	\$
Other direct costs (enter fully burdened dollar amount)	\$	\$	\$	\$
A Total Cost to Execute Scope of Work	\$	\$	\$	\$
B1 Cost Share Amount (Cash)	\$	\$	\$	\$
B2 Cost Share Amount (In-kind)	\$	\$	\$	\$
RPSEA Funding Requested (A - (B1+B2))	\$	\$	\$	\$
<p>Cost Share (B1+B2) must be at least 20% of Total Cost (A) for research and development projects and 50% of Total Cost (A) for demonstration projects. The nature (cash or in-kind) and amount of required cost-share must be fully documented in Section A.2 of the Technical Volume.</p>				

ATTACHMENT IV - PROPOSAL SUBMISSION CHECKLIST

- Technical Volume (page limit as specified in Attachment III)
 - Cover Page with required contact information
 - Proprietary data clearly marked "Proprietary"
 - Follow "Table of Contents" in Attachment III
 - Required Tasks included in Work Plan
 - Complete Cost Summary Form included
 - Page limitation adhered to
 - Resumes included as Appendix

- Executive Summary (separate computer file, see Attachment III)
 - Project title, name of Offeror (prime contractor) and of PI
 - Project objectives, description, duration, & impact
 - List of other participants performing scope of work
 - List of organizations providing cost share

- Signed Proposal Signature Page (Section VI of Attachment I)
 - Signed by Authorized Agent and dated

- Documents submitted in Microsoft Word 97-2003 format. (The Cost Summary may be included in a word document, but it must be submitted separately in Excel format. The Proposal Signature page, Resumes and Letters of Support for Cost Share may be submitted in PDF format.)

- Send proposal via email with all attachments appropriately titled, using ZIP format if necessary.

- 20 megabyte size limit to transmitted email.

CHECK WITH YOUR INTERNAL IT DEPARTMENT FOR ANY SIZE LIMITATIONS OF ATTACHMENTS YOUR EMAIL SERVER MAY ENFORCE.