

## **Science Solicitation Questions and Answers**

### **1. Are landfill gas energy projects eligible applicants for your solicitation?**

STAC Response: STAC will not assess the eligibility of an applicant or its project without reviewing a pre-application package. No preference is being given to any specific technology or project in the solicitation. However, if the landfill gas energy project fits the criteria described for research under the solicitation then such a project may qualify as an eligible project.

### **2. What is the number of expected awards and/or an expected dollar cap on each award?**

STAC Response: There is no pre-determined funding amount per project or anticipated number of awards under the solicitation. The STAC solicitation does not indicate, nor does the STAC Executive Committee favor, a particular dollar threshold for proposed projects. No matter the size, the STAC Executive Committee is interested in impact projects that result in significant technical advances and/or substantial deployment of technologies indicated in the various program areas of interest included in the solicitation and that recognize the multi-state nature of the solicitation.

### **3. Would feasibility studies [as identified in the examples below] be allowable proposals for STAC?**

#### **Examples:**

- ◆ **Identifying assets that would be suitable for collateralization via revolving loan funds**
- ◆ **Sizing the market for CHP applications installed in municipal waste-water treatment plants**
- ◆ **Assessing the volume of training needed to complement tomorrow's industrial plant technologies**

STAC Response: "Bridge" R&D is defined as research and development categories that occupy the spectrum between exploratory science and pre-commercial applied R&D. Furthermore, the STAC Executive Committee is interested in impact projects that result in significant technical advances and/or substantial deployment of technologies indicated in the various program areas of interest included in the solicitation and that recognize the multi-state nature of the solicitation. Feasibility studies do not appear to be the type of projects that would fit the STAC requirements; however, STAC will not assess the eligibility of an applicant without reviewing a pre-application package.

### **4. I noted that the total monies available for the STAC program are \$4,333,562.00. What is the ceiling that an applicant can request?**

STAC Response: Please see the response to Question No. 2.

5. **We have two research projects with Tennessee Valley Authority (TVA) regarding furnace optimization in a coal fired power plant at TVA's Bull Run Steam Plant, TN. We would like to do further research for a full system implementation at TVA's plant. Reading through the solicitation, we have questions of eligibility as our proposal partner is TVA. Does TVA fit in the "State Energy Office or State-Chartered Institution from another State or Territory" category?**

STAC Response: The solicitation provides that the following are eligible applicants:

- a) State Energy Offices defined as the agency or instrumentality of the States, Territories and the District of Columbia, exclusive of local governments, responsible for developing the state energy plan pursuant to Section 362 of the Energy Policy and Conservation Act (42 U.S.C. § 6322), exclusive of State Public Service Commissions that are not also the State Energy Offices;
- b) State-Chartered Institutions—a college or university, or an instrumentality specially authorized or created pursuant to State law or regulation, the laws of the District of Columbia or the laws of the respective Territories, exclusive of local governments, private for-profit businesses and national laboratories. Specific evidence and certification by a responsible official must clearly show that a proposer is a State-Chartered Institution; and
- c) Institutions of Higher Learning—a public college, university or institution not covered by “State-Chartered Institutions,” as well as private colleges, universities or institutions that promote and foster higher education.

The Tennessee Valley Authority is defined as a wholly owned Federal Corporation. *See* 16 U.S.C. § 831(c). *See also* [www.tva.gov](http://www.tva.gov).

Therefore, it is our understanding and belief that the Tennessee Valley Authority would not qualify within one of the three categories defined for eligible applicants. However, if you have evidence indicating that under certain instances the Tennessee Valley Authority would meet the criteria of eligible applicant provided in the solicitation please submit such information with your pre-application for review.

6. **I have 2 questions on the Pre-application instructions, regarding the sentence: *"In addition, the proposer shall provide a brief summary of the project objectives ... as well as a listing of the major tasks, approximate cost and schedule."***
- a. **Do you require that the approximate cost and schedule be included for each task or is it acceptable to include only the estimated cost and schedule for the entire project?**

STAC Response: The cost estimate and schedule under the Pre Application stage shall be for the entire project. The proposer can, if it wishes to provide that level of detail, break the cost estimate and schedule down by task.

**b. Should cost-share portion of project be included in the approximate cost?**

STAC Response: The cost estimate under Pre-Application stage should include the entire cost for the project, including the cost-share.

- 7. On page 9 of the April 7, 2004 STAC solicitation announcement under J. Cost Share Requirements is stated, "As part of its Cost Proposal submission, each member of a proposal team must provide a certification of commitment for the cost-sharing portion of the proposal, signed by a certifying official of the cost sharing entity." Are certifications of commitment required at the pre-application phase, or only with full proposals?**

STAC Response: Pursuant to Section 3, Part A, Pre-Application Instructions, a proposer is only required to submit a cost estimate. However, in the event a proposer submits a full proposal pursuant to Section 3, Part B, Full Proposal Instructions, a proposer will need to submit a Cost Proposal with the requisite certification of commitments.

- 8. Q: On page 1 of the solicitation we are instructed that both pre-applications and full proposals must be submitted electronically. Assuming the certifications of commitment desired should contain an institution's/business's letterhead and a signature how are these to be sent electronically? Should they be converted to pdf documents or simply scanned into a word document? Is either preferred? We ran into this using the DOE IIPS system and figured everyone would like to know if you have any preferences.**

STAC Response: Per the solicitation summary and Section 1, Part D and E, pre-applications and full-proposals must be submitted electronically, in either Word or Wordperfect format. However, certifications or other supporting proposal documentation will be accepted as an Adobe .PDF file.

- 9. We'd like to submit a proposal for this RFP. Our team consists of New Mexico State University and University of Texas at El Paso. Do we need to include a State Energy Office as our partner?**

STAC Response: A Proposer (e.g., state -chartered institution, which is defined to include state authorized colleges or institutions) may partner with other state-chartered institutions in another state in order to comply with the requirements of the solicitation.

- 10. We would like to submit a joint proposal corresponding to the solicitation of STAC *Energy Efficiency and Fossil Energy Science (04-STAC-01)*. I wonder if we are eligible for the application. Here is the relevant information for your review.**

**Proposal title: Highly sensitive electrochemical sensors with novel nanostructured electrodes for gas (NO<sub>x</sub>, CO) detection at high-temperature**

**Areas of interest: *Sensors and Controls***

**PI: University of Pittsburgh, a state-chartered institution in Pennsylvania State**

**Co-PI: Northwestern University, a higher-learning institution in Illinois State**

STAC Response: STAC will not assess the eligibility of an applicant or its project without reviewing a pre-application package. Pursuant to Section 1, Part C, a proposer (e.g., state -chartered institution, which includes state authorized colleges or institutions) may partner with an institution of higher learning in order to comply with the eligibility requirements of the solicitation. Section 2, Program Areas of Interest, includes sensors and control sciences as an area where STAC is seeking the development of sensors and controls in cross-cutting applications.

- 11. Can the funds from Bonneville Power Administration be used as cost share? Although BPA is part of Department of Energy, much of the demand side management and energy efficiency funds come from ratepayers.**

STAC Response: Only cost share (e.g., funds) from non-Federal sources shall be considered for total cost share purposes. Funds from other Federal sources cannot be counted as non-Federal Recipient contributions. Non-Federal sources include private, State or local Government, or any sources that were not originally derived from Federal funds.

Bonneville Power Administration is considered a federal agency under the jurisdiction and control of the Secretary of Energy. See 16 U.S.C. § 832a. See also [www.bpa.gov](http://www.bpa.gov).

Therefore, it is our understanding and belief that funds provided by Bonneville Power Administration would be federal funds. However, if you have evidence indicating that certain funds provided by Bonneville Power Administration would meet the criteria of non-Federal funds defined in the solicitation please submit such information with your pre-application for review.

- 12. Page 18 of the RFP refers to "substantive activity by eligible partners in 2 or more states." Is there a minimum % of cost share or total project cost activity that a Prime and the 2nd State Partner must provide/perform?**

STAC Response: The collaborative nature of the Science Solicitation portion of the STAC program requires that proposed projects include a minimum non-federal cost share of 20% as described in Section 1.J., Cost Share Requirements. The proposer is responsible for obtaining the minimum cost share requirements. The term "substantive activity" includes, but is not limited to, active participation by multiple Eligible Applicants, either in the research, funding, implementation or dissemination areas.

- 13. If a private consultant or contractor is a third (or fourth) partner is there a cap on the amount of STAC grant funding that can be spent by that third (fourth) party?**

STAC Response: A proposer and its other eligible partner(s) must meet all the requirements of the solicitation, including submitting at least a 20% cost share for their proposed project. Although a proposer may pass through the funds it receives to a subcontractor, subcontracts issued by a proposer cannot include more STAC funding than that identified within the agreement between NASEO and the proposer. In the event the proposer and its other eligible partner(s) passed through all of the STAC funding to a subcontractor, they would retain their entire obligation to contribute substantive activity to the project.

**14. Will there be any royalty requirements for inventions as a result of grant efforts?**

STAC Response: Intellectual property requirements are included in the Model Contract. Specifically, Article XIV states that the Government will have “royalty-free, irrevocable, unlimited” rights in all Generated Information. Please also refer to DEAR 952.227-9, Refund of Royalties (MAR 1995) for royalty requirements.

**15. The RFP refers quite specifically to "fuel cell gas turbine hybrids" - what are the existing products or "state-of-the-art" that are targeted for advancement?**

STAC Response: Please refer to the Program Areas of Interest in the solicitation and the applicability of your project to the subject areas. We are not in a position to further define the categories at this time.

**16. What is the maximum duration and amount of funding available under this solicitation?**

STAC Response: Projects may be proposed with performance periods of one to three years. Approximately \$4,333,562 is available under this solicitation. There is no pre-determined funding amount per project or anticipated number of awards under the solicitation.

**17. On page 1, Eligibility: the instructions say "...the proposer must be a State Energy Office, a State-Chartered Institution, or an Institution of Higher Learning...." If Lehigh teams with a State Energy Office in another state, which entity can be the proposer?**

STAC Response: A State Energy Office, a State-Chartered Institution, or an Institution of Higher Learning may be a proposer under this solicitation. Therefore, either Lehigh (as an Institution of Higher Learning) or the State Energy Office (or state-chartered institution) in another state could qualify as proposers.

**18. Program Area of Interest 2B "Hydrogen Separation Technology" (p. 11 of the solicitation) appears to be limited to membranes. Would other technologies that also separate hydrogen from other gases such as CO2 be considered? For example, gas-**

solid reactions can also be used to separate hydrogen from gases produced from the various feedstocks that are shown in section 2B, producing a pure hydrogen stream at the same 400C temperature specified in this section.

Because these types of systems cannot be compared directly with the given performance criteria for membranes, it is necessary to be sure that the technologies that would be considered are not limited to membranes alone.

STAC Response: STAC will not assess the eligibility of an applicant or its project without reviewing a pre-application package. No preference is being given to any specific technology or project included in the solicitation. However, we do not clarify that Program Area of Interest 2B should be interpreted broadly, as not to be limited to only membrane separation.

19. **In response to the STAC Energy Efficiency and Fossil Energy Science Solicitation announced, April 7 2004, I need to help on determining if the below program is a fit under Program Area 5- Emission Reduction and Environmental Sciences (Cat A) CO2 capture and sequestration.**

**DESCRIPTION OF PROGRAM/NEW TECHNOLOGY DEVELOPMENT -  
"Enhanced Coal Bed Methane production Potential from Carbon Dioxide Injection into Unmineable Coal Seams Underlying Landfill"**

The proposed research/new technology development program would be for the engineering design, construction and test/demonstration of a system for enhanced coal bed methane production using untreated landfill gas (40% carbon dioxide (CO<sub>2</sub>); 60% methane) that is extracted using a methane-fueled engine, and injected into underlying unmineable coal seams. The injection into coal seams could enhance the production of CBM from these seams and the resultant gas would be marketed as a backup fuel to local businesses and government facilities.

The scope of the program would initially involve engineering design including optimization of the number of injectors and producers, well type (vertical, horizontal, etc), injection volumes, pressures and spacing requirements in the coal seams. This will be followed by the demonstration in the field to verify the technical and financial feasibility of injecting untreated landfill gas into underlying unmineable coal seams and the test of coal filtration potential and enhanced (via CO<sub>2</sub> sequestration) coal bed methane production.

The result would be a major reduction in the amount of CO<sub>2</sub>/methane released to the atmosphere from U.S. Landfills as well as providing alternate emergency fuel supplies to federal and state facilities. The injection into coal seams would enhance the production of coal bed methane (CBM) from these seams and the resultant gas would be marketed as a backup fuel to local businesses and government facilities.

STAC Response: STAC will not assess the eligibility of an applicant or its project without reviewing a pre-application package. No preference is being given to any specific technology or project included within the solicitation. However, we do note that CO<sub>2</sub> Capture and Sequestration is one of the program areas included in the solicitation. *See* Section 2, Part 5.A.

**20. Please define the term State-Chartered Institution and give an example. Please provide a listing of or a web site for State Energy Offices.**

STAC Response: Please see STAC Response #5 and Section 1 of the STAC Solicitation. A listing of the State Energy Offices, along with links to various websites, may be found at [www.naseo.org](http://www.naseo.org).