

**Amendment 002
under Program Solicitation No. DE-PS26-00NT40854**

The purpose of the subject amendment is to update the solicitation and to provide responses to questions submitted under the solicitation. Accordingly the following changes are hereby made:

1. Section I - TECHNICAL REQUIREMENTS, MINIMUM REQUIREMENTS table. The row in the table entitled, EFFICIENCY (AC or DC/LHV), is deleted in its entirety and replaced with the following:

MINIMUM REQUIREMENTS			
	PHASE I	PHASE II	PHASE III
EFFICIENCY (AC or DC/LHV)	Mobile: 25% - 45%	Mobile: 30% - 50%	Mobile: 30% - 50%
	Stationary: 35%-55%	Stationary: 40% - 60%	Stationary: 40% - 60%

Note that preceding change is also made to the MINIMUM REQUIREMENTS table, found in the sample cooperative agreement, SECTION IV, ATTACHMENT A1, under the STATEMENT OF WORK.

2. Paragraph 3, EFFICIENCY, under the MINIMUM REQUIREMENTS (Supplement) section, contained on Page 5 of the solicitation is deleted in its entirety and replaced with the following:

“3. EFFICIENCY

The efficiency values indicated in the goals may be based on both documented calculations and measurements. The efficiency requirement must be met by the average of the efficiency determined at the beginning and end of the complete test sequence and one measurement at the 1000 hour point of the first steady-state test period. The efficiency is defined as AC or DC power output of the system divided by the Lower Heating Value (LHV) of the fuel input stream of the system at full rated load at the Steady State Normal operating condition over a period of at least one hour.”

3. The following Article is hereby added under Section II -- CONDITION AND NOTICES:

Article 2.43 LICENSING OF SUBJECT INVENTIONS ARISING UNDER THE SECA CORE TECHNOLOGY PROGRAM

As a condition of award under the **Core Technology Program** (not the subject solicitation), participants will be required to offer to each of the Industrial Teams the first option to enter into a non-exclusive license upon terms that are reasonable under the circumstances, including royalties, for **subject inventions** developed under the Core Technology Program. Field of use of the license would be limited to solid-oxide fuel cell applications, although greater rights could be offered at the discretion of the invention owner.

Participants in the Core Technology Program must hold open offers to Industrial Teams for at least 1 year after U.S. patents are issued. The invention owner must agree to negotiate in good faith with any and all Industrial Teams that indicate a desire to obtain at least a non-exclusive license. Exclusive licensing may be considered if only one Industrial Team expresses an interest in licensing the invention. Partially exclusive licenses in a defined field of use may be granted to an Industrial Team, provided such license would not preclude any other Industrial Team that indicates a desire to license the invention from being granted at least a non-exclusive license. If no agreement is reached after nine months of negotiations, the Industrial Team Members can take action in a court of competent jurisdiction to force licensing on reasonable terms and conditions.

In order to impose this requirement on small businesses, non-profit organizations (including educational) and National Laboratories selected for award under the **Core Technology Program**, the Department signed an Exceptional Circumstances Determination in November 2000. In the Determination, DOE does not require the licensing of any background patents owned by the invention owner. This requirement will be imposed on other

types of entities under the terms of DOE's existing Patent Rights clauses found in DEAR 952.227 and waiver regulations found at 10 CFR § 784.

4. The following changes are hereby made to Article 3.4, VOLUME I - FINANCIAL APPLICATION DOCUMENT PREPARATION INSTRUCTIONS (JULY 2000).

- A. The following sentence is hereby added under Paragraph 2, APPLICATION FOR FEDERAL ASSISTANCE Standard For 424# -- Form # SF424.

The applicant and each member of applicant's team must complete the SF 424#.

- B. Add the following paragraph.

“12. PROJECT TEAM AGREEMENTS

The proposed project team must be identified and firmly committed to fulfilling its proposed role in the project.

The project team should be made up of those organizations or parties responsible for accomplishing the project. The project team includes the legal entity responsible for the project (i.e., the prospective Participant), technology licensors, and other third parties identified in this application (excluding financial institutions) who are essential to the successful completion of the proposed project. Where a legal entity has been or will be created to conduct the project, DOE will consider the participating organizations or parties (partners, joint venture members, etc.) as project team members.

The applicant shall provide from each member of the team a legally binding agreement, or letter of intent to reach such agreement, that explicitly states the role of the team member in the project and the nature of its business relationship for purposes of this project. These documents must be signed by a corporate official or other appropriate person authorized to legally bind these entities. These letters shall be included in Volume I of the application.”

5. The first paragraph under Article 3.7, VOLUME III - COST APPLICATION PREPARATION INSTRUCTIONS, is deleted in its entirety and replaced with the following:

“The applicant and each member of the applicant team must provide budget information on one or more of the following budget forms. The budget for Phase I should be accompanied by detailed supporting cost information as required in Paragraph 1 below. Budgetary estimates should only be provided for Phases II and III.”

6. The following DOE responses are provided to questions submitted under the subject solicitation:

Question:

Section 1.3, Solicitation Objectives, Page 2, First Paragraph

DOE at its discretion may require testing of each phase prototype at NETL prior to progressing to a subsequent phase. Depending upon the length of time for NETL to accomplish the testing, this requirement may make it very difficult for the Industrial Team to maintain continuity and availability of key personnel. If the Industrial Teams prototype testing is successful, we request that the team be allowed to proceed to the next phase in parallel with any further testing that is performed at NETL.

DOE Response:

The decision to proceed to a subsequent phase or budget period is contingent on DOE approval. If a recipient chooses to proceed into a subsequent phase or budget period without approval of the Government, it does so at its own risk and the DOE is under no obligation to reimburse such costs if it for any reason chooses not to pursue a subsequent phase or budget period.

Question:

Section 1.3, Solicitation Objectives, Page 2, Second Paragraph

"Insulation should be removable and reusable, and representative of the proposed applications." The meaning and purpose of this requirement, which singles out only insulation and no other components, is not clear and we request a clarification.

DOE Response:

As detailed in the solicitation on Page 2, **all** aspects of the prototype deliverable should be consistent with the application(s) proposed, with the exception of the insulation, which should be removable and reusable, and representative of the proposed applications. The Government would like to have the insulation removable and reusable to provide some visual access to the system. It is recognized that this may not provide complete access, or in some cases much at all. If this requirement cannot be achieved given the system proposed, the applicant should elaborate in its application as to why.

Question:

Minimum Requirements (Supplement), Page 5, 2. Efficiency

Efficiency values for each phase must be achieved or exceeded over the entire test period. Especially during Phase 1, since the steady state power output can degrade over the 1500 hour period, this requirement may conflict with maintaining the efficiency specified. Should this requirement be limited to Phase 3?

DOE Response:

Paragraph 3, EFFICIENCY, contained under the MINIMUM REQUIREMENTS (Supplement) section of the solicitation (Page 5) previously stated the following: "The efficiency values indicated in the goals may be based on both documented calculations and measurements. The efficiency values must be achieved or exceeded at the beginning and end of the test sequence. The efficiency is defined as AC or DC power output of the system divided by the Lower Heating Value (LHV) of the fuel input stream of the system at full rated load at the steady state normal operating condition over a period of at least one hour."

Recognizing that efficiency could both increase or decrease over time based on burn-in and conditioning effects, power degradation, system degradation, etc., the preceding statement is modified as detailed in Paragraph 1 of this amendment.

Question:

Regarding the SECA solicitation, will DOE provide a list of companies that perform the type of audit functions requested in the solicitation? As you know, the solicitation calls for three auditing firms to be identified and presented to the DOE for approval of one of the firms. It would be very helpful and cost effective to have DOE provide a list of potential approved audit companies to the stakeholders.

DOE Response:

It is the applicant's responsibility to identify and present to the DOE the name(s) of possible auditing firms.

Question:

Under the section entitled "Cost Estimate" on page 20 of the solicitation, the last sentence in the second paragraph reads "DOE currently considers the minimum number of units will be no less than 50,000 base (3kW to 10kW) systems per year." Will DOE consider the solicitation requirements to have been satisfied if the cost targets are shown to be achievable at production volumes of less than 50,000 systems per year?

DOE Response:

The applicant may make any argument it wants concerning production numbers necessary to meet the cost requirements. The 50,000 number gives some guidance on the current thinking at DOE; however, the DOE will consider other numbers accompanied by persuasive justification and documentation.

Question:

On page 11 of the solicitation, under the section entitled "Notice of Restriction on Disclosure and Use of Data" the last sentence of the first paragraph reads "This restriction does not limit the Government's right to use or disclose data obtained without restriction from any source, including the applicant." It is our understanding that "without restriction" in this sentence applies to the data obtained and not to the Government's right to use or disclose the data. Please confirm this understanding.

DOE Response:

The term "without restriction" applies to both the data obtained and the Government's right to use or disclose the data.

Question:

On page 20: A. Technical Approach - paragraph 5:

States:

The applicant shall provide a discussion detailing if the prototype will be manufactured using the same methods projected for the production of the fuel cell system on a mass-produced basis. In not, please provide rationale as to why it is not important that the batch methods used to produce a successful prototype be scaled to an automated mass production scale.

Can you give an example of what is meant by this? For instance, if a component is made using screen printing in the prototype and the final product will use screen printing for the same component, does the system have to be automated for "mass production" or can the small-scale, not "automated" system be used for the prototype? Are we correct to interpret this statement as meaning if the final product will be use automated screen printing to produce a component, the industrial team should use laboratory EVD to produce the component, unless a compelling argument can be made that the part made with EVD will be approximately the same (in both performance and cost) as the screen print part.

DOE Response:

Paragraph 2 under Article 1.3, SOLICITATION OBJECTIVES (Page 2), states the following: "The prototype must be manufactured using the same methods identified in the audited cost estimate and projected for production of the fuel cell system on a mass production scale. It is important that the batch methods used to produce a successful prototype can be scaled to an automated mass production scale.

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This requirement is to ensure that all components of the prototype can be produced using processes scalable to mass production and that the cost estimate reflects this requirement. It is not desirable to manufacture prototype components using techniques that are not the same as the manufacturing techniques intended for full mass production. It would be inconsistent with the SECA goal of producing a prototype amenable to immediate production of commercial units at the SECA factory cost goals.

Given the discussion above, yes, you are correct in assuming that an applicant must make a very compelling argument for deviating from the SECA goal of having a prototype that could be immediately produced via mass production manufacturing methods at the SECA factory cost goals.

Question:

Cost Goals:

Is the industrial team required to be producing the prototype at the end of Phase I for a cost of \$800/kW? Or, does the industrial team have to demonstrate that they have the capacity to produce prototypes at \$800/kW if the manufacturing processes were operated at a high level of capacity? Or does the industrial team have to show that the chosen manufacturing processes, if built and operated at a high capacity, would produce prototypes at \$800/kW?

DOE Response:

The SECA cost goals for Phases I through III represent a Factory Cost as characterized in the Minimum Requirements supplement. The cost goals represent an estimated cost at the end of each phase based on anticipated production numbers consistent with proposed market applications. The cost estimate will have to be validated by an independent auditing agency before the end of each Phase as stated in the solicitation.

Question:

Reference: Section II, 2.8 Time, Date, and Place Applications are Due, pg. 8. Are there any limitations on the number of times an organization may submit an application? For example, if an offeror submits an application in Evaluation Period 1 that does not result in an award, is that same offeror permitted to resubmit an application in Periods 2 or 3?

DOE Response:

NETL has no limitations on the number of times an organization can submit an application. If an applicant is not selected under Evaluation Period 1, it can resubmit under Evaluation Period 2.

Question:

Reference: Section III, 3.4 Financial Application Instructions, pg. 19. In item 10, is there a distinction between “cost participation” and “cost sharing.” If so, please explain the difference.

DOE Response:

For purposes of Item 10 (and all other references in the solicitation), there is no distinction between the term “cost participation” and “cost sharing.”

Cost participation is a generic term denoting any situation where the Government does not fully reimburse the applicant for all allowable costs necessary to accomplish the project or effort under the agreement. The term includes, but is not limited to: cost sharing, cost matching, cost limitation (which may be direct or indirect), and participation in-kind.

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Question:

Our organization will be responding to the SECA RFP and we have a question regarding the prime contractor. We are currently in discussions with a public corporation to form and provide funding for a new corporate entity. The public corporation will hold significant equity in new corporate entity, as will our current organization, who will manage and be the controlling shareholder of new corporate entity for the foreseeable future. We would like to know if new corporate entity will be acceptable as prime for the SECA proposal. Also, since it is probable that new corporate entity will not legally exist by the submission date, we would like to propose that any award we may receive be subject to our current organization providing information regarding new corporate entity which is satisfactory to DOE at the time of contract negotiation. Thank you for your consideration.

DOE Response:

As detailed in Paragraph 4 of this amendment, where a legal entity has been or will be created to conduct the project, DOE will consider the participating organizations or parties (partners, joint venture members, etc.) as project team members. If the entity who will become the Recipient is not in existence, but will come into existence before award, the parent and predecessor organizations must sign and execute the application documents as described in Paragraph 4 and 5 of this amendment. In addition, the proposed organization structure must be clearly identified and discussed in detail in the offer taking into consideration the application instructions and evaluation criteria. The applicant should also describe the timing of the entity's formation in its application.

END OF AMENDMENT 002