



**US Army Corps  
of Engineers®**

Engineer Research and  
Development Center

**BROAD AGENCY ANNOUNCEMENT  
PEM FUEL CELL DEMONSTRATION  
W9132T-04-R-BAA1**

**SEPTEMBER 2004**

**VICKSBURG CONSOLIDATED CONTRACTING OFFICE  
CHAMPAIGN FIELD OFFICE  
2902 Newmark Drive  
Champaign, IL 61822-1076**

## PREFACE

The Construction Engineering Research Laboratory (CERL) is part of the Engineer Research and Development Center (ERDC), which is the Army Corps of Engineers' integrated research and development (R&D) organization. CERL conducts research to support sustainable military installations. Research is directed toward increasing the Army's ability to more efficiently construct, operate, and maintain its installations and ensure environmental quality and safety at a reduced life-cycle cost. Excellent facilities support the Army's training, readiness, mobilization, and sustainability missions. An adequate infrastructure and realistic training lands are critical assets to installations, which serve as platforms to project power worldwide. CERL also supports ERDC's R&D mission in civil works and military engineering.

CERL works closely with its Army customers to develop quality products and services and to help customers implement new technologies. User groups and steering committees have been established to help identify existing problems, establish research priorities, and provide input into the development of products. Many CERL products developed under this teamwork approach are in daily use, both within the Department of Defense (DoD) and the private/public sectors. An active technology transfer program ensures these products receive the widest dissemination among prospective users.

The provisions of the Competition in Contracting Act of 1984 (P.L. 98-369) as implemented in the Federal Acquisition Regulation (FAR) provide for the issuance of a Broad Agency Announcement (BAA) as a means of soliciting proposals for basic and applied research, and that part of development not related to the development of a specific system or hardware procurement. BAAs may be used by agencies to fulfill their requirements for scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution. The BAA shall only be used when meaningful proposals with varying technical/scientific approaches can be reasonably anticipated.

“Basic Research” is defined as research directed toward increasing knowledge in science with the primary aim being a fuller knowledge or understanding of the subject under study, rather than any practical application of that knowledge. “Applied Research” is the effort that normally follows basic research, but may not be severable from the related basic research; attempts to determine and exploit the potential of scientific discoveries or improvements in technology, materials, processes, methods, devices, or techniques; and attempts to advance the state-of-the-art. This announcement must be general in nature, identify the areas of research interest, include criteria for selecting proposals, and solicit the participation of all offerors capable of satisfying the Government’s needs. The proposals submitted under this BAA will be subject to peer or scientific review. Proposals that are selected for award are considered to be the result of full and open competition and in full compliance with the provisions of P.L. 98-369, the Competition in Contracting Act of 1984.

This guide provides prospective offerors information on the preparation of proposals for applied research. Suggestions as to form and procedures are included. Proposals from U.S. Government facilities and organizations, including Federally Funded Research and Development Centers (FFRDCs), will not be considered under this program announcement. **PERSONS SUBMITTING PROPOSALS ARE CAUTIONED THAT ONLY A CONTRACTING OFFICER MAY OBLIGATE THE GOVERNMENT TO ANY AGREEMENT INVOLVING EXPENDITURE OF GOVERNMENT FUNDS.**

This BAA is specifically designated for proposals related to a Proton Exchange Membrane (PEM) Fuel Cell Demonstration Of Domestically Produced Residential PEM Fuel Cells in Military Facilities. This BAA is open to all offerors, however, offerors who are not residential PEM fuel cell manufacturers must submit a signed letter of agreement from a residential PEM fuel cell manufacturer which states that the

particular manufacturer will sell a specified number of specified sized units in a specified time frame and at a specified price to the particular offeror. Only domestically-produced residential PEM fuel cells will be considered in this BAA. "Domestically produced" is defined as the power plant(s) being substantially produced in the United States (i.e. at least 50 percent of the value of the components must be manufactured in the United States). Individual projects may consist of single fuel cell units, or a combination of fuel cell units at a single site. In either case, individual projects must be between the sizes of 1 kilowatt (kW) and 20 kW. Project size will be based on the maximum fuel cell steady-state power rating, rather than on planned fuel cell operating power level. This program represents a real world demonstration and validation of PEM fuel cell systems at military facilities; as such, projects requiring substantial research and development will not be funded.

Initial pre-proposals received under this announcement must be submitted by **01 NOV 04** for awards to be made from the FY2004 funding. Pre-proposals will be reviewed in the order received. All awards are subject to the availability of funds. Although this announcement shall remain open for a period of up to one year or until superseded, review of any pre-proposal received after 01 NOV 04 may be delayed until all timely proposals have been processed. Please note that funding may not be available beyond that utilized for award of the proposals received by the specified deadline.

All offerors submitting a proposal under this BAA must be registered and valid in the Central Contractor Registration (CCR) system at <http://www.ccr.gov> before an award can be made. Reference Part IV of this BAA for information regarding the CCR. In addition, all offerors, by submission of an offer or execution of a contract in response to this solicitation, certify that they are not debarred, suspended, declared ineligible for award of public contracts, or proposed for debarment pursuant to FAR 9.406-2. If an offeror cannot so certify, or if the status of the offeror changes prior to award, the offeror must provide detailed information as to its current status.

Offerors submitting proposals are reminded that all transactions conducted under this announcement shall conform to the requirements of the FAR and its supplements. Contracts awarded by CERL will contain, where appropriate, detailed special provisions concerning patent rights, rights in technical data and computer software, reporting requirements, equal employment opportunity, and all other applicable FAR and supplementary clauses.

Please contact Mrs. Rita Brooks of the Vicksburg Consolidated Contracting Office, Champaign Field Office, via email at [Rita.S.Brooks@erdc.usace.army.mil](mailto:Rita.S.Brooks@erdc.usace.army.mil) if you have any questions concerning submittal or contractual requirements.

## PART I

### PROTON EXCHANGE MEMBRANE (PEM) FUEL CELL DEMONSTRATION OF DOMESTICALLY PRODUCED RESIDENTIAL PEM FUEL CELLS IN MILITARY FACILITIES

**A. Core Requirement:** The core requirement of this BAA is for the offeror to supply a turn-key package for the installation, operation, maintenance, monitoring, and removal/site restoration of domestically-produced residential PEM fuel cell(s) at military facilities. Beyond this core requirement, the offeror must state which conditions from the included matrix of parameters in Part I, Section C below that they will satisfy. The goal of this demonstration program is to have as much variety and meet as many of the matrix of parameters as possible, therefore multiple awards are anticipated. Offerors are encouraged to propose the installation of multiple units at multiple sites. Although each individual project (as defined in Section B, Paragraph 1 below) shall be priced separately to facilitate partial award where merited or due to lack of sufficient funding, it is recommended that each offeror submit only one proposal to facilitate only one award per vendor. Discounts which may apply for funding of multiple projects should be identified separately. Although this program is named “residential,” the sites do not necessarily need to be dwellings as long as the load matches.

**B. Core Requirement Definitions:**

1. Domestically Produced Residential Fuel Cells – Individual projects may be proposed which consist of single fuel cell units, or a combination of fuel cell units at a single site. In either case, individual projects must be between the sizes of 1kW and 20kW. “Domestically produced” is defined as the power plant (s) being substantially manufactured in the United States (i.e., at least 50 percent of the value of the components must be produced in the United States).

2. Military Facilities – Army, Air Force, Navy, Marine, and Coast Guard facilities, both active and reserve, are all acceptable host sites for the demonstration. Military or DoD related sites not included in this list will be considered on a case-by-case basis.

3. Installation of Unit(s) – The offeror shall install the unit(s) with full cooperation and consideration of the host military site(s), abiding by any safety, scheduling, or other requirements imposed by the site(s). The offeror will be responsible for any siting, permitting, or interconnect issues. Installation of the unit(s) will be complete when the offeror has completed a documented on-site acceptance test demonstrating the capability to produce power (and heat, if cogeneration is present) as per the manufacturer’s specifications. The acceptance test will include a one-time measurement of total harmonic voltage distortion while providing power to the site under normal load conditions.

4. Operation of Unit(s) – The offeror shall operate the unit(s) at the host military site(s) and obtain a minimum of one (1) year of fuel cell power. Fuel cell power is defined as the host required power output up to the specified output of the fuel cell at a minimum average availability of 90%. This is further clarified to mean that the fuel cell shall be required to operate a minimum of one year, and as long as necessary thereafter to obtain a minimum average availability over the life of its operation of 90%. If a project is made up of a combination of fuel cell units, each individual fuel cell must meet the 90% availability criterion.

5. Maintenance of Unit(s) – The offeror shall provide reasonable on-site maintenance to the installed unit(s) as required to meet any operational, safety, scheduling, etc. requirements. If the unit(s) are beyond any on-site repair, replacement unit(s) will be furnished and installed. A log of maintenance

activities performed will be required as part of the final report. Specifically, for any service activities, the maintenance personnel should record the date, time of arrival and departure from the site(s), and any applicable notes that relate to the repairs or actions undertaken while at the site(s).

6. Monitoring of Unit(s) – The offeror shall monitor all units at all sites during the demonstration period. Data shall be recorded, analyzed, and presented in the form of a report at the end of the demonstration period. As a minimum, the parameters which shall be monitored include total operating hours, fuel input, total kW hours (kWh) produced, availability, outages and duration (start/stop events with associated dates and times), maximum kW produced, outdoor ambient temperature, and total heat recovered (only if cogeneration is present). Data from the above parameters shall be collected on intervals of one hour or less. Offerors are encouraged to propose additional data collection in order to provide more detailed performance analyses of the unit(s).

7. Removal/Site Restoration – The offeror shall include in the proposal the costs associated with removal of the unit(s) from the site(s), as well as restoration of the site(s), after the completion of the demonstration period or at the request of the Government, whichever occurs first.

### C. Matrix of Offeror Specified Parameters:

Under this BAA, as long as the Core Requirements are first met, offerors must then specify the parameters under which they agree to perform individual project(s) from the following matrix:

Fuel Natural Gas Propane Hydrogen Other	Grid Connect Grid Independent Both (alternating)	Cogeneration No Cogeneration	Altitude Sea Level < 500 ft 500 ft < 1250 ft 1250 ft < 4000 ft 4000 ft < 5280 ft > 5280 ft
Single Units Ganged Units	Fuel Switching No Fuel Switching Fuel Blending	Remote Site?	Hybrid System?
Own/Lease Unit	Maximum/Minimum Temperature Restrictions?		

**D. Meetings:** Successful offerors will be required to participate in two meetings to be held at each site as described below:

1. Kickoff Meeting – This meeting is to be held after contract award and submission and approval of the draft Initial Project Description Report as described in Section E below. The purpose of this meeting is to obtain formal agreement of the project plans from all parties having pertinent input to the project approval process, prior to the initiation of the installation process.

2. Acceptance Meeting – This meeting is to be held after the acceptance test has been performed and prior to the submission of the final Midpoint Project Status Report as described in Section E below. The purpose of this meeting is to inspect the installation site and review the acceptance test results. The

results of this meeting will form the basis for acceptance of the final Midpoint Project Status Report. This meeting may be held in conjunction with a public affairs/dedication event if desired by the offeror.

**E. Deliverables:** Beyond the turn-key package described above, the successful offerors will be required to submit documentation of the projects. All reports as described below are to be submitted in draft and final versions with the exception of monthly data. Offerors shall include in their proposal, as a minimum, submission of the following documentation in electronic format (Word for reports and summary data, Excel for raw data, etc.):

1. An Initial Project Description Report which includes information regarding the site(s), the specific building or other application(s), the site(s) points of contact (POCs), digital pictures of the site(s) along with the building(s) or area(s) where the fuel cells are to be installed, utility rates at the site(s), and an estimate of the energy savings (electric energy and demand savings plus heat energy (if any) savings minus input fuel cost). As an example of the type of information required, refer to the DoD Fuel Cell Demonstration Website at <http://www.dodfuelcell.com> and the individual site information located within. The draft Initial Project Description report shall be submitted within 4 months of award of any applicable contract awarded as a result of a proposal received under this BAA.

2. Performance Data shall be submitted monthly following the installation of the fuel cell. The Government will provide a template to be used to collect and report this data.

3. A Midpoint Project Status Report shall be submitted within two months after the fuel cell(s) are installed at the particular site(s). The midpoint Project Status Report shall contain digital pictures of the installed fuel cell(s), documentation of the installation process including the duration and other pertinent parameters, and documentation of the acceptance test of the fuel cell. This report shall also include a summary of the performance monitoring data collected to date.

4. A Final Report shall be developed at the end of the project after one full year of fuel cell power has been delivered at the individual site(s) as defined in Paragraph B.4. above. The draft Final Report shall be submitted within two months after the end of the demonstration period, and the Government will review and provide comments which shall be incorporated in a final report. The Final Report shall contain the complete documentation of the project, to include material from the initial Project Description Report and the midpoint Project Status Report, as well as all maintenance logs, all performance monitoring data and a month by month summary of this data, along with a conclusions section. The Final Report should include a comparison of actual fuel cell performance to the fuel cell specifications provided in the full proposal. It should also include a breakdown of actual project costs and a comparison to the estimated costs in the cost proposal. It should include a discussion of any pertinent installation, acceptance, or permitting issues, and summary of lessons learned. Of particular interest are any product improvements resulting as a direct consequence of this demonstration program.

## PART II

### PRE-PROPOSAL AND PROPOSAL PREPARATION AND SUBMISSION

**A. BAA Process:** Response to this BAA is a two-phase process. All offerors are required initially to submit a phase I pre-proposal. CERL staff will review each pre-proposal to determine if further consideration is warranted. This decision will be based on scientific merit; potential contribution to the CERL mission; the offeror's capabilities, qualifications and experience; and availability of funding for the effort. Upon completion of the initial review, each offeror will be notified either of rejection and the rationale for this decision; or encouraged to submit a phase II, full proposal. This part is intended to provide information needed in preparing phase I and phase II proposals. **It is important that the offeror carefully address the requirements of this section.** Omissions of required information may delay the CERL evaluation, or may result in rejection of a proposal.

**B. Points of Contact (POCs):** The CERL technical POCs for this BAA are Dr. Michael Binder, (217) 373-7214, and Mr. Frank Holcomb, (217) 373-5864. Prior to submission of a phase I pre-proposal, prospective offerors are encouraged to call the appropriate CERL POC to ask questions of a technical nature. However, offerors **shall not** discuss cost or seek guidance on the direction that the research project should take. In other words, the offer submitted shall be the offeror's own ideas and may not be influenced by the Government. After submission of a pre-proposal, all questions and requests for assistance must be directed to the Contracts Office, to Mrs. Rita Brooks at (217) 373-7280 or Mrs. Deloras Adamson at (217) 373-7297. In addition, any questions regarding the BAA process or proposal preparation and submission shall be directed to the Contracts Office.

**C. Submission Address:** The Government requests that all pre-proposals and full proposals be submitted via electronic mail (Word format is preferred) to [Rita.S.Brooks@erdc.usace.army.mil](mailto:Rita.S.Brooks@erdc.usace.army.mil), and that they include a reference to this announcement, No. CERL-BAA-FY04. If a paper form is submitted, or for printed brochures, etc., they may be mailed to:

Vicksburg Consolidated Contracting Office  
ATTN: Champaign Field Office/Mrs. Rita Brooks  
P. O. Box 9005  
Champaign, IL 61826-9005

or via express mail services to the following:

Vicksburg Consolidated Contracting Office  
ATTN: Champaign Field Office/Mrs. Rita Brooks  
2902 Newmark Drive  
Champaign, IL 61822-1076

**D. Type of Contract:** It is anticipated that all contracts awarded under this BAA will be issued on a firm fixed-price basis. This type of contract is selected when the project costs can be reasonably estimated, and the services to be rendered are reasonably definite. In this type of contract, the negotiated price is not subject to any adjustment on the basis of the Contractor's cost experience in performing the contract. Any requests for issuance of a contract on other than a firm fixed-price basis should include the rationale for the request and they will be reviewed on a case-by-case basis.

**E. Pre-proposal Format and Requirements:** Valid pre-proposals shall be limited to a brief letter, not to exceed six (6) pages (not including the curriculum vitae and/or resume), and shall contain the following information:

1. A descriptive title of the research proposed;
2. The name and address of the individual, company, or educational institution submitting the pre-proposal;
3. The name and phone number of the principal investigator or senior researcher who would be in charge of the project, and any authorized negotiators for the project;
4. Product specifications and descriptions of the proposed fuel cell(s), and an estimated factory production schedule (required from both fuel cell manufacturers and non-fuel cell manufacturers). Please note that only projects between 1 kW and 20 kW made up of domestically-produced residential PEM fuel cells will be considered in this BAA. If the offeror is not a manufacturer of residential PEM fuel cells, a letter of agreement from a residential PEM fuel cell manufacturer must be provided which states that the particular manufacturer will sell a specified number of specified sized units in a specified time frame and at a specified price to the particular offeror;
5. The proposed start date and duration of the project (in terms of months after award of contract rather than specific dates);
6. The estimated costs, including but not limited to labor, materials, fringe benefits, overhead, travel, and profit (if any);
7. One or more paragraphs describing the proposed project to include the core requirements specified above; the proposed site for installation along with the corresponding number, size, manufacturer(s), and model(s); and the specific conditions to be addressed from the matrix identified above. A letter from an authorized individual from the proposed host site must be provided indicating the willingness of the proposed host site to participate in the proposed demonstration.
8. One or more paragraphs describing the technical approach to be taken in the course of the research. This shall include installation, operation, maintenance, monitoring, and removal/site restoration, and an estimated timetable of events;
9. A one-page only resume/vitae for each principal investigator and/or key personnel who will be involved with the project; and
10. A description of the offeror's capabilities and previous experience as related to fuel cells. Include the agency the work was performed for, contract number, dollar value, and the name of a point of contact, phone and/or email address. (No more than two pages in length.)

**F. Full Proposal Format and Requirements:**

1. Full proposals will be accepted only upon request from the Vicksburg Consolidated Contracting Office, as the direct result of a favorably evaluated pre-proposal.
2. Full proposals shall include a more detailed description of all the information submitted with the pre-proposal, including the specific sites, along with any additional information requested by the Government based on review of the pre-proposal. This shall include a complete discussion stating the

background and objectives of the proposed work, the approaches to be considered, the proposed level of effort and the anticipated results/products in terms of benefit to the particular research program. Full proposals shall also include a firm timeline or project schedule (in terms of months after award of contract) and a complete description of the fuel cell units. The key technical specifications for the fuel cells should include, but are not limited to , sustainable power output, sustainable efficiency, voltage, polarization curves, heat recovery available, peak power capability, duration of peak power, durability, maintenance requirements, emissions, noise level, etc. These data should be later validated against the operating data following the installation of the units in the field.

3. The technical portion of the full proposal shall also contain the following:

a. An indication that the offeror is a manufacturer of residential PEM fuel cells, or a letter of agreement from a residential PEM fuel cell manufacturer which states that the particular manufacturer will sell a specified number of specified sized units in a specified time frame and at a specified price to the particular offeror. In addition, the proposal shall include a paragraph describing the manufacturing capability of the manufacturer (number of units per calendar year or similar);

b. Identification of amenable host sites, as evidenced by submittal of a signed letter or electronic mail from the military facility's energy manager equivalent or higher authority;

c. The names, brief biographical information, experience, education, and a list of recent publications of the offeror's key personnel who will be involved in the research;

d. A brief description of the offeror's organization;

e. A description of the reports and deliverables to be submitted; and

f. Past relevant performance information to include the name, address, point of contact, phone number, contract identification number, contract award date and amount, for a minimum of three (3) customers for whom the offeror has performed services in the last three (3) years.

4. The cost portion of the proposal shall contain a cost estimate sufficiently detailed by element of cost for meaningful evaluation. This cost proposal is to be submitted in electronic format using a template which will be provided to the offeror at the time a full proposal is requested. This cost estimate shall include the following, as applicable:

a. Fuel Cell Power Plant Cost - include an itemized list of equipment showing the estimated cost of each item, including documentation of catalog or market prices, if applicable;

b. Power Plant Installation Cost (including costs associated with installation design and permitting) - A complete cost breakdown of direct labor by discipline, function or position, hours proposed or percentage of time, hourly rate or salary, fringe benefit percentage rate and cost base. Also, include an itemized list of materials required;

c. Thermal Recovery Connection Costs, if any;

d. Performance Monitoring Equipment Cost;

e. Project Management/Report Writing Expenses - include reproduction costs, computer time, etc.;

f. Maintenance Cost ;

g. Travel Costs - A complete breakdown of travel requested by the offeror to include airfare, rental car, per diem, location, number of trips, duration of trips, number of people/trip, etc.;

h. Site Restoration Costs;

i. Other Costs - Include in this category any miscellaneous piping, tanks, fuel (if supplied by offeror), delivery charges, description and cost of expendable supplies;

j. A complete breakdown of any subcontracts, including the name and rationale for each selection. If the proposal is in excess of \$500,000, subcontracts are proposed, and the offeror is not considered a small or small and disadvantaged business concern, a subcontracting plan will be required prior to award in accordance with FAR 52.219-9 and evaluated in accordance Army FAR Supplement, Appendix DD as found at <http://farsite.hill.af.mil/VFAFARa.htm>;

k. Indirect cost rates and bases with a statement as to whether the rates are fixed or provisional and the time frame to which they apply;

l. Proposed fee or profit, if any; and

m. Cost Share/Co-funding (if applicable)- Identify any proposed cash contributions or non-cash support (e.g. in-kind labor, etc). Proposed co-funding must be spent only on the project described in the proposal. Staff time, facility use, equipment, and most property can be considered co-funding as long as it is fully dedicated to the project for the time that the property or equipment is required by the contract. However, please note that regardless of whether any costs sharing is proposed, contracts awarded as a result of this project are anticipated to be awarded on a firm fixed price basis.

5. In addition to the technical and cost proposals, the following additional information is requested with each submission in response to a full proposal request:

a. The name, phone number, fax number, and email address of the offeror's authorized negotiators;

b. The offeror's Data Universal Numbering System (DUNS) number, the Commercial and Government Entity (CAGE) Code, and Taxpayer Identification Number (TIN) (reference Part IV), if known; and

c. Completed certifications as specified in Part IV of this BAA.

### PART III

#### PRE-PROPOSAL AND FULL PROPOSAL EVALUATION

**A. Pre-proposal Evaluation:** Upon receipt of a valid Phase I pre-proposal (not to exceed six pages), CERL staff will provide an initial review of the offer's scientific merit; potential contribution to the CERL mission; the offeror's capabilities, qualifications and experience; and the availability of funds for the proposed research. Offerors who have submitted pre-proposals that merit further consideration will be encouraged to submit a Phase II full proposal. The Government may make recommendations for the full proposal that should be considered prior to submission.

**B. Full Proposal Evaluation:** Full proposals requested by the Government will be evaluated by CERL staff in accordance with the criteria specified below which are equally important. However, if all other factors are considered equivalent, the total proposal cost/installed kW rating of the fuel cells (criteria #1 below) will be the deciding factor. Upon completion of the evaluation, each offeror will be notified either of rejection, and the rationale for this decision, or of acceptance. The criteria for evaluation are as follows:

1. Total Proposal Cost / Installed kW rating of fuel cells;
2. The offeror's capabilities, related experience, facilities, techniques, or unique combinations of these that are integral factors for achieving the proposal objectives;
3. Reasonableness and Firmness of Production / Project Timetables. Preference will be given to projects with earlier completion dates;
4. Uniqueness of Proposal/Project;
5. Extent to which Offeror meets Core Requirements;
6. The qualifications, capabilities, and experience of the principal investigator, team leader, and other key personnel who are critical to achievement of the proposal objectives; and
7. The offeror's record of past performance.

**C. Special Evaluation Criteria:** It is the intent of the Government to review and evaluate each proposal independently in the order received. Due to the limited resources available for FY2004 and the goals of achieving maximum diversity in conditions and operations, any of the criteria listed above may be superseded if diversification has not been met. For example, if proposals for fuel cells in all CONUS regions have already been selected and a proposal for an OCONUS region is received along with another CONUS region proposal, the OCONUS region proposal could potentially be selected over the CONUS region proposal, even if the Total Proposal Cost / Installed kW rating of the OCONUS proposal is higher than that of the CONUS proposal.

**D. Additional Information:** Pre-proposals and proposals not considered to have sufficient scientific merit or relevance to CERL's needs may be declined without further review. If a Full Proposal is accepted by the Government, it will then be assigned to a Contract Specialist who will negotiate as necessary and prepare a solicitation package with all of the terms and conditions necessary for a contract which will be forwarded to the offeror for signature. If these terms are acceptable to the offeror, they shall complete and return copies of the solicitation document as instructed. Offerors are cautioned that no

contract is final until signed by an authorized Contracting Officer. Any press releases or papers concerning projects awarded under this BAA must reference the CERL PEM Fuel Cell Demonstration Program, and must be provided to CERL for review and comment prior to release or publication.

## PART IV

### GENERAL CONTRACT CLAUSES AND PROVISIONS

**A.** The following clause shall be applicable to all contracts awarded under this BAA. Registration in CCR is required prior to any contract award:

**252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION ALTERNATE A (NOV 2003)**

(a) Definitions. As used in this clause--

“Central Contractor Registration (CCR) database” means the primary Government repository for contractor information required for the conduct of business with the Government.

“Commercial and Government Entity (CAGE) code” means--

(1) A code assigned by the Defense Logistics Information Service (DLIS) to identify a commercial or Government entity; or

(2) A code assigned by a member of the North Atlantic Treaty Organization that DLIS records and maintains in the CAGE master file. This type of code is known as an “NCAGE code.”

“Data Universal Numbering System (DUNS) number” means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

“Data Universal Numbering System +4 (DUNS+4) number” means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11 of the Federal Acquisition Regulation) for the same parent concern.

“Registered in the CCR database” means that--

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database;

(2) The Contractor's CAGE code is in the CCR database; and

(3) The Government has validated all mandatory data fields and has marked the records “Active.”

(b) (1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation “DUNS” or “DUNS +4” followed by the DUNS or DUNS +4 number that identifies the offeror's name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number--

(i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at <http://www.dnb.com>; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company Physical Street Address, City, State, and Zip Code.

(iv) Company Mailing Address, City, State and Zip Code (if separate from physical).

(v) Company Telephone Number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g) (1) (i) If a Contractor has legally changed its business name, “doing business as” name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database; (B) comply with the requirements of Subpart 42.12 of the FAR; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the “Suspension of Payment” paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the “Suspension of payment” paragraph of the EFT clause of this contract.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423, or 269-961-5757.

(End of clause)

**B.** The following certifications shall be completed and submitted with the offeror's full proposal, as applicable:

**1. 52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)**

(a) Definitions.

“Common parent,” as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

“Taxpayer Identification Number (TIN),” as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

\_\_\_ TIN: \_\_\_\_\_

\_\_\_ TIN has been applied for.

\_\_\_ TIN is not required because:

\_\_\_ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

\_\_\_ Offeror is an agency or instrumentality of a foreign government;

\_\_\_ Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

\_\_\_ Sole proprietorship;

\_\_\_ Partnership;

\_\_\_ Corporate entity (not tax-exempt);

\_\_\_ Corporate entity (tax-exempt);

\_\_\_ Government entity (Federal, State, or local);

\_\_\_ Foreign government;

\_\_\_ International organization per 26 CFR 1.6049-4;

\_\_\_ Other \_\_\_\_\_

(f) Common parent.

\_\_\_ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

\_\_\_ Name and TIN of common parent:

Name \_\_\_\_\_

TIN \_\_\_\_\_

(End of provision)

**2. 52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (DEC 2001)**

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that-

(i) The Offeror and/or any of its Principals-

(A) Are ( ) are not ( ) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have ( ) have not ( ), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are ( ) are not ( ) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.

(ii) The Offeror has ( ) has not ( ), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer

may terminate the contract resulting from this solicitation for default.

(End of provision)

**3. 52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 2004) -  
ALTERNATE I (APR 2002)**

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 335999.

(2) The small business size standard is 500 employees.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations. (1) The offeror represents as part of its offer that it ( ) is, ( ) is not a small business concern.

(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it ( ) is, ( ) is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a women-owned small business concern.

(4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a veteran-owned small business concern.

(5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a service-disabled veteran-owned small business concern.

(6) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, as part of its offer, that--

(i) It ( ) is, ( ) is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It ( ) is, ( ) is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: \_\_\_\_\_.) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(7) (Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.)  
The offeror shall check the category in which its ownership falls:

\_\_\_ Black American.

\_\_\_ Hispanic American.

\_\_\_ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

\_\_\_ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

\_\_\_ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

\_\_\_ Individual/concern, other than one of the preceding.

(c) Definitions. As used in this provision--

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern," means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern," means a small business concern --

(1) That is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; or

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice.

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)