

AMENDMENT NUMBER 0001
BAA 11-002 ENTITLED
“RENEWABLE SUSTAINABLE EXPEDITONARY POWER”

The purpose of Amendment 0001 is to amend BAA 11-002 as follows:

1. The due date for full proposals shown in Sections I.5 is revised as follows:

5. Response Date –

- White Papers: 1/28/2011 (4:00 PM Eastern Standard Time)

- Full Proposals: 4/8/2011 (4:00 PM Eastern Standard Time)**

2. Section I.6.2 is revised to remove the “RSEP Performance Specification” requirement in Phase 2 - Year 3 (option) (previously paragraph 3) as follows:

6.2 Program Plan:

The RSEP FNC EC is a 5-yr (FY12-16) S&T effort intended to culminate in the transition of a technology demonstrator to the Program Manager - Expeditionary Power Systems (PM-EPS). Accordingly, this BAA is issued to implement the contractual structure necessary to develop and demonstrate the technology to the level of TRL 6 within a 5-yr effort.

The primary objective of this BAA is determining the optimal, affordable solution for achieving dramatic reductions in expeditionary fuel usage.

The two planned phases covered by this BAA and the objectives for each are described below.

Phase 1 (FY12-13) - Conceptual Development

Phase 1 - Year 1 (base):

1. Identify technology development(s) necessary for dramatic fuel savings.
2. Develop overall concept(s) for renewable-based expeditionary power.
3. Demonstrate functional and dynamic feasibility and practicality of the concept(s) through analysis, modeling and simulation.
4. Identify operational (tactical) impacts and risks associated with the proposed concept and a risk mitigation strategy.
5. Study affordability of the concept(s) vs. existing, traditional power generation approaches.

Phase 1 - Year 2 (option):

1. Develop and de-risk enabling technologies through lab-based technology experimentation, to demonstrate performance and mature conceptual designs to

TRL 5.

2. Based on results, update analyses conducted during Year 1 objectives 1-5.
3. Document results and develop a proposal for Phase 2.

Phase 2 (FY14-16) - System Integration and Full-scale Demonstration

Phase 2 - Year 1 (base):

1. Preliminary design of RSEP demonstrator.
2. Detailed design of RSEP demonstrator.
3. Conduct critical review of demonstrator design and cover topics, including (at a minimum): detailed description of demonstrator design (hardware, firmware, and software); design for compliance with Section 6.3 requirements, risk areas, long-lead items, cost of individual vendor items, and overall affordability projections.

Phase 2 - Year 2 (option):

1. Fabricate and assemble RSEP demonstrator and integrate with Light Tactical Trailer.
2. Prepare detailed test plan for demonstrating compliance with TRL 6. Specific test methods shall be proposed, test procedures shall be addressed in detail, facilities shall be identified, and a schedule shall be provided. Tests shall be identified with the intent of demonstrating compliance with Section 6.3 requirements. Advance agreements with all outside test facilities (government, private, university, etc.) shall be discussed.

Phase 2 - Year 3 (option):

1. Conduct testing necessary to demonstrate compliance with Section 6.3 requirements and achievement of TRL 6.
2. Prepare a TRL 6 Demonstration report.
3. Develop a Technology Transition Plan. A detailed cost estimate for initial production of RSEP systems shall be developed. A detailed life-cycle cost estimate shall be provided. A return on investment analysis shall be a part of the TTP. Remaining technical risks and a mitigation plan shall be provided.

See Sec. II of this BAA for additional detailed award information.

3. Section II, Award Information, is revised as shown in bold below:

II. AWARD INFORMATION

A. PHASING

ONR anticipates that up to 4 IDIQ awards will result from this BAA. The amount of funds and period of performance for each proposal may vary depending on the technical approach to be pursued by the offeror, it is expected each proposal will be structured similarly to the program structure below.

Total amount of funding available for each Task Order:

- Phase 1, year 1 (base): Up to \$0.5M per award
- Phase 1, year 2 (option): Up to \$1M per award
- Phase 2, year 1 (base): Up to \$1M per award
- Phase 2, year 2 (option): Up to \$1.5M per award
- Phase 2, year 3 (option): Up to \$1.5M per award

Anticipated number of Task Orders:

- Phase 1, year 1 (base): Up to 4 Task Orders
- Phase 1, year 2 (option): Up to 3 Task Orders
- Phase 2, year 1 (base): Up to 3 Task Orders
- Phase 2, year 2 (option): Up to 2 Task Orders
- Phase 2, year 3 (option): Up to 2 Task Orders

Anticipated period of performance for each Task Order:

- Phase 1: Base year + 1 option year
- Phase 2: Base year + 2 option years

The IDIQ minimum quantity will be \$25,000. Subsequent Task Orders will be issued based on the success of the prior phase and will follow the criteria established in FAR 16.505. The IDIQ maximum quantity will be based on the total program estimate, which is approximately \$13.0 M.

B. CONTRACT DOWNSELECT PARAGRAPH

Since this is a multiple award solicitation, up to four task order awards are anticipated to be issued for Conceptual Design, Modeling, & Simulation and three for System Integration & Full-Scale Demonstration. For Phase I, each Offeror selected for a basic award will receive a Task Order 0001 contract including a Base and Option period. A down selection for the Preliminary Design and Lab Based Design Validation option will be based on the contractor's performance during the Phase I Base and evaluation of its Phase I Base products in relation to the evaluation criteria **in Section V.1**. Awardees of the Phase I Option will be given a fair opportunity, as prescribed in FAR 16.505(b), to submit a proposal for Phase II Task Order 0002. Although the Government may issue Task Order 0002 to all awardees of the Phase I option, the Government reserves its right to provide a further downselect at the beginning of Phase II based on the following: availability of funds, contractor's performance during Phase I, and evaluation of its Phase II proposal. The Task Order 0002 contracts will consist of a Base and two Options. A down selection for the full-scale prototype system fabrication and demonstration (Option 1 and Option 2) will be based on an assessment of the contractor's performance during the preceding periods of performance and their deliverables, in relation to the evaluation criteria **in Section V.1**.

This competitive process will be simplified in order to facilitate the order process and prevent undue administrative burden upon the Contractor and the Government. This paragraph includes the procedures that will be used in issuing

orders and the procedures and selection criteria that will be used to provide all awardees a fair opportunity to be considered for each order.

According to FAR 16.505, the Contracting Officer shall ensure that individual orders clearly describe all services to be performed or supplies to be delivered. The Contracting Officer shall ensure that orders are within the scope, period, and maximum value of the contract as stated in the Contract.

Although ONR expects a program phasing plan similar to the above to be executed, ONR reserves the right to make changes.

In the case of funded proposals for the production and testing of prototypes, ONR may during the contract period add a contract line item or contract option for the provision of advanced component development or for the delivery of additional prototype units. However, such a contract addition shall be subject to the limitations contained in Section 819 of the National Defense Authorization Act for Fiscal Year 2010.

4. The Deliverables/Reports paragraph under the “Full Proposals” subsection of Section IV.2. is revised to remove the “RSEP Performance Specification” requirement as follows:

Deliverables/Reports: The following are deliverables that are required under this research effort:

Phase 1, year 1: Interim Progress Review Briefs, Detailed Expenditure Plan and Schedule, Monthly Technical and Financial Progress Statements, and Conceptual Development Report.

Phase 1, year 2: Interim Progress Review Briefs, Detailed Expenditure Plan and Schedule, Monthly Technical and Financial Progress Statements, Phase 2 Proposal, and TRL 5 Demonstration Report. Note that Phase 2 Proposal shall be submitted 8 months after the Phase 1 Option is exercised.

Phase 2, year 1: Interim Progress Review Briefs, Detailed Expenditure Plan and Schedule, Monthly Technical and Financial Progress Statements, Detailed Design Report, and Detail Design Drawings.

Phase 2, year 2: Interim Progress Review Briefs, Detailed Expenditure Plan and Schedule, Monthly Technical and Financial Progress Statements, Detailed Demonstration/Test Plan

Phase 2, year 3: Interim Progress Review Briefs, Detailed Expenditure Plan and Schedule, Monthly Technical and Financial Progress Statements, Full Scale RSEP System Prototype, TRL 6 Demonstration Report, and a Technology Transition Plan.

Additional data deliverables may be proposed and finalized during negotiations. Include a specific description of the deliverables and the timeframe in which they will be delivered.