Amendment 0004 Solicitation Number ONRBAA11-016 "Long Endurance Undersea Vehicle Propulsion"

The purpose of Amendment 0004 is to amend the BAA and respond to questions submitted prior to the deadline for submissions 2:00 pm 29 APR 2011.

BAA 11-016 is hereby amended as follows:

1. Questions and Answers are provided as follows:

1. Question:

Section 6.2 and Table 2: What regulation or quality requirements are there on the 24- 48 VDC bus voltage provided by the energy section?

Answer:

The voltage quality/regulation requirements will be provided to successful offerors during Phase I.

2. Question:

Page 5 of ONR BAA 11-016 specifies that "effluence (from the power system) is prohibited during peak power operations". Question: If an effluent stream is undetectable, is it allowed? Here are two examples:

- a) Can seawater used for system cooling be pumped overboard during full power?
- b) Can a seawater stream with small entrained bubbles of a soluble gas be pumped overboard during full power?

Answer:

a) Yes, seawater used for system cooling may be pumped overboard during full power.

b) No, a seawater stream with small entrained bubbles of a soluble gas may not be pumped overboard during full power.

3. Question:

Should the initial procurement focus on long lead items deemed necessary to be initiated in order to support the Phase II schedule, as opposed to initiating the total procurement package?

Answer:

a) Yes, the initial procurement should focus on long lead items deemed necessary to be initiated in order to support the Phase II schedule.

4. Question:

Does the ONR budget for combined Phase 1 Base and the Phase 1 Option of approximately \$3.5 M per award assume that it will cover the procurement cost commitment for items placed on order prior to the completion of the Phase 1 Option? The procurement costs may be formidable, and estimating procurement costs at this point to be included in the Phase 1 Option proposal is challenging given the present level of technology maturity that ONR is expecting in proposals. Will ONR consider supplementing the \$3.5M budget with Phase II money when the time comes to procure Phase II components while under contract for the Phase Option? If so, then should the cost proposal for the Phase I Option not include the cost of Phase II procurement components?

Answer:

The funding in Phase I Option is to assist in procuring long-lead items so they may be ordered prior to the start of Phase II. Phase II funding will not be available until the awarding of a Phase II contract.

5. Question:

Is the Phase 2 approach part of the 15 page technical section?

Answer:

Yes, Refer to Section 6, paragraph 6.2, page 3 of ONR BAA 11-016.

6. Question:

Do liquid fuel based systems need to comply with DOD directive 4140.25 regarding fuel standardization?

Answer:

Refer to Section I, General Information of ONR BAA 11-016.

What is the thickness and material of the energy section hull? This information is needed to compute thermal conductivity of the hull.

Answer:

Refer to question 13, Amendment 0003 to ONR BAA 11-016.

8. Question:

The Key interfaces specification is for "24-48VDC (bus voltage) conduit for vehicle cable pass-through; health/remaining energy monitor. Systems need to provide conversion to electrical power on demand at the bus voltage." Does this imply a single bus voltage within this range or is it requesting multiple bus voltages over this range?

Answer:

Refer to question 9, Amendment 0003 to ONR BAA 11-016.

9. Question:

Technical and Cost Proposal Template, Section 3 - Requirements under the Title of Program/Services and/or Supplies notes the numbers of the tasks. Is it a requirement to start at 3.1?

Answer:

No, task requirement numbering is not required to start at 3.1.

10. Question:

The BAA states that no effluence shall be discharged during peak power operations. Please describe what constitutes effluence. For example, at peak power the vehicle could make significant depth excursion that require sea water be flooded or pumped from the vehicle in order to maintain neutral buoyancy. More specifically, is sea water exchange considered effluence for either buoyancy control or cooling water?

Answer:

Refer to question 2 above.

Slide 18 of the UUV Energy ONR Industry Day package dated 8 February 2011 shows use of inner rib volume along with a diagram of a pressure hull with internal ribs. We assume that this diagram (a pressure hull with internal ribs) represents the configuration envisioned for the GFE energy section hull to which offerors' energy systems will be integrated. Is this correct? What are the nominal dimensions and spacing of the ribs of the GFE energy section hull?

Answer:

Refer to question 13, Amendment 0003 to ONR BAA 11-016.

12. Question:

If offerors use the volume between the GFE energy section hull ribs, we assume that the length requirement is still 30 inches yielding an effective volume which may be larger than the specified 132 liters. Is this correct?

Answer:

Refer to Table, page 2 of ONR BAA 11-016.

13. Question:

A 132 liter volume with a mass of 132 kg is positively buoyant in salt water, but the requirement is neutral buoyancy. We assume that the neutral buoyancy specification takes precedence over the 132 kg weight specification. Is this correct?

Answer:

Refer to question 10, Amendment 0001 to ONR BAA 11-016 published 18 April 2011.

14. Question:

Section 6. states, "Any proposal that does not provide a specific full system solution, as well as a safety analysis, will not be considered." We assume this means proposers must include the required Preliminary Hazard/Safety Analysis (PHSA) as part of the scope of work when awarded the contract, NOT that the proposal itself must include a safety analysis. Is this correct?

Answer:

Yes, proposers must include the required Preliminary Hazard/Safety Analysis (PHSA) as part of the scope of work.

Does the ability of the full energy section to meet the environmental metrics have to be tested in the Phase I Base Period, or is a development plan that supports the ability of the full energy section to meet the environmental metrics sufficient in the Phase I Base Period?

Answer:

Refer to question 25, Amendment 0003 to ONR BAA 11-016.

16. Question:

Will the hull section provided allow equipment be mounted inside of it?

Answer:

Refer to question 6, Amendment 0001 to ONR BAA 11-016 published 18 April 2011.

17. Question:

The BAA indicates that effluence is prohibited during peak power operations. For the purposes of this specification, does effluence include thermal energy convected from the surface of the hull?

Answer:

No, effluence does not include thermal energy convected from the surface of the hull.

18. Question:

Does ONR have any guidance as to how access to the power module will be provided for corrective and depot level maintenance?

Answer:

Refer to Table 2, page 7 of ONR BAA 11-016. Corrective and depot level maintenance could involve more invasive access, likely with the energy section disassembled from the vehicle.

19. Question:

Please clarify in Table 1 of ONR BAA 11-016, does the Energy Volume and Energy Mass thresholds/objectives include the fuel storage?

Answer:

Yes, the Energy Volume and Energy Mass thresholds/objectives include the fuel storage.

20. Question:

How critical are the Energy Volume and Energy Mass Thresholds? Can the system be slightly larger to accommodate the fuel storage tanks?

Answer:

Refer to question 19 above.

21. Question:

Is the loss of function of the Energy System, i.e. no power output to the vehicle when needed, considered a Category I hazard?

Answer:

Power loss by itself does not constitute a Category I hazard.

22. Question:

The terms "loss of system" and "major system damage" are included under Category I and II hazard definitions; is this implicitly referring to the Energy System, or is it referring to vehicular systems at an integrated level?

Answer:

The terms "loss of system" and "major system damage" are applied to the energy section itself, to any vehicle it is integrated with, and to any vehicle on which it is stored and/or transported.

23. Question:

Currently, in the template there is no provision to enter references to documents, previous research and supporting publications. Where would the government like to see references listed?

Answer:

Provide only the documents requested within the template or specifically requested within ONR BAA 11-016. Refer to Section IV Application and Submission Information, pages 15-21 of ONR BAA 11-016.

24. Question:

Is a list of references an approved attachment or does it count against page limitations?

Answer:

Refer to question 23 above.

25. Question:

Does the cost proposal for Phase 2 have to be a Phase 1 deliverable, or can the vendor spend internal funds to provide the Phase 2 proposal?

Answer:

The Phase II technical and cost proposal will be a deliverable under the Phase I Option. Refer to page 9, Phase I Option, Deliverable of ONR BAA 11-016.

26. Question:

Do you have an example available of a properly written technical proposal and cost proposal spreadsheet using the new formats? Specifically, is further sub-paragraph numbering in the Technical Approach and SOW sections allowed? It is not entirely clear how to map SOW sections to the cost proposal spreadsheet. Is it acceptable to add tabs to the cost proposal spreadsheet that will directly map to the proposal SOW, then feed those numbers into the pertinent spaces in the existing (required) tabs?

Answer:

Examples of the technical and cost proposal spreadsheet are not available. As stated in ONR BAA 11-016, Section IV Application and Submission Information, page 16, "Requirements" in the *Technical and Cost Proposal Template* has numbering requirements for tasks, which <u>must</u> map directly to the Work Breakdown Structure (WBS) developed for pricing the proposal. Offerors may use a mapping system of their choice to meet this requirement.

When completing the Technical and Cost Proposal Template, how are things such as proprietary markings, tables, and graphics to be handled within the template?

Answer:

Tables and graphics would be submitted as attachments and would also count towards section page counts unless stated otherwise.

See Question 32 below regarding proprietary markings.

28. Question:

The note below Section IV, 2c states that responses to the additional factors (Intellectual Property, Patents, etc.) "...can be incorporated into the Template file for submission." Please clarify the process for "incorporating" these responses into the Template file.

Answer:

Additional factors such as "Intellectual Property and Patents" would be submitted as an attachment to the technical cost proposal template. Follow instructions contained within the template for attaching documents.

29. Question:

Is the requirement for subcontractors and inter-organizational entities to complete the cost proposal spreadsheet applicable if their effort is \$150,000 or more at a cumulative level (Phase I + Phase I Option) or is this the threshold for each phase?

Answer:

The requirement for subcontractors and inter-organizational entities to complete a cost proposal spreadsheet would apply to the cumulative level of the Phase I and Phase I Option proposal.

30. Question:

In the cost proposal spreadsheet on the subcontractor tab there is language that states, "A cost proposal as detailed as the Offeror's cost proposal including support documentation will be required to be submitted by all proposed subcontractors and for all interorganizational transfers over \$150,000." Does this mean that if the subcontractor meets the threshold that they will have to provide a cost volume as detailed as what is being provided by the prime or

does it mean that they need to provide the cost proposal spreadsheets along with the supporting documentation that was the bases of the inputs?

Answer:

As stated, "A cost proposal as detailed as the Offeror's cost proposal including support documentation will be required to be submitted by all proposed subcontractors and for all interorganizational transfers over \$150,000." Cost proposal spreadsheets along with supporting documentation must be provided.

31. Question:

I understand the Proposal Template is required. Is it acceptable to attach documents for the Technical Approach and Justification, SOW, Management Approach, etc. and just refer to the document in the specific section? Or is it required to embed the text for these sections directly in the template?

Answer:

Referencing attached documents within the text boxes is unacceptable. Data must be placed within the text boxes located in each section of the template.

32. Question:

The Technical and Cost Proposal Template has no provision for proposal front matter such as a Cover Letter/Page, Table of Contents and Executive Summary. We intend to submit these items on printed pages inserted before Section I (General Information) of the template and, for the CD ROMs, to provide them in a separate electronic pdf. Please confirm that this is an acceptable and compliant approach.

Answer:

Please Note: This is a revision to the answer previously provided in Amendment 0002, question 19, regarding submission of a cover page.

A cover page for the purpose of addressing proprietary markings may be included as an attachment within the Technical and Cost Proposal Template. The cover page must not exceed one (1) page, and will <u>not</u> count towards the overall page count of the proposal packet.