OLCF-6 Questions and Answers

<u>Aug. 15, 2024</u>

1. **Will OLCF extend the proposal submission deadline?**

   No, proposals will be due on Friday, August 30.

2. **In the PEPPI Section A, it states that the "The Offeror's proposal must have a cover letter." Can you please clarify that the Cover letter should be provided as a separate document?**

   Yes, it should be provided as a separate document.

3. **In the PEPPI Section A regarding Volume 1, can graphics and tables incorporated into the supplied template have a smaller font than the 11 pt font specified for the template text response if it is legible?**

   Yes, text associated with graphics and tables can have smaller than 11pt font, but to assist our reviewers we ask that it be no smaller than 8pt font in all cases.

4. **In the TRD Section 11.1, please clarify if the Executive Liaison is intended to be the executive level resource with sponsor responsibility for this program and resources, such as a Vice President or General Manager; or, if the "liaison" is intended to be a more project specific resource who manages access to that executive and others as needed. A short description of the expectation for this role would be helpful.**

   The Executive Liaison is the highest person in the company that champions the program. While the Program Manager manages the day-to-day issues as they arise, the Executive Liaison gets involved when the Program Manager needs assistance within the Offeror's organization to meet an objective, solve an issue, etc.

5. **May we make minor changes to the titles of the proposed Key Personnel, to more accurately represent our delivery model?**

   Yes.

6. **Is the class waiver applicable to Intellectual Property provisions in the NRE portion only?**

   Yes.

7. **Will Oak Ridge allow for Offerors to provide a SharePoint link with the benchmark script information?**

   Yes.

8. **What are the expected qualifications of the ES&H support person (education or certification levels) that would map to anticipated graded risks?**

   Experience in an ES&H role of 3 years or an OSHA 30 General Industry training class would be an appropriate level of training. The representative should have the technical competency to identify, understand and manage all aspects of hazard analysis, hazard mitigation, and safe work control for all work going on at the site at any given time. This role will be required to keep the vendor hazard analysis up to date and will be required to brief all incoming vendor employees and sub-tier employees.

9. **Is it anticipated that the ES&H representative have their primary function be ES&H or can we provide a trained onsite technical person for the onsite support and collaboration with ORNL staff?**

   The ES&H representative can have other duties, but the ES&H role takes primacy over any other supervision duties. The vendor shall give the ES&H designated person sufficient time and resource to execute the designated S&H responsibilities as a first priority of work. The designated person may have concurrent additional jobsite duties only to the extent those additional duties do not interfere with the ability to perform S&H responsibilities.

10. **In the PEPPI table 1 has 4 sections for Volume 7. Is this correct? Or are the 3 sections described in section H all you are looking for?**
    Neither a Section 4 to Volume 7 nor a "Summary Matrices Spreadsheet" seems to be referred to anywhere else in the RFP documents. This looks like it is a typo in the table, and there is no Section 4 or additional spreadsheet. Please could you confirm that this is the case?

    Table 1 is out of date. Just the three sections described in Section H. There is no Summary Matrices Spreadsheet. Also, see the question below about the format of the benchmark report's sub-sections.

11. **The requirement 7.3.1 is ambiguous. It says "The Offeror should also describe support for machine learning library interfaces with base languages." We are not sure if base languages in this context means Python, if it should adopt the same definition as 7.6 of C/C++ and Fortran, or if it means all of the previous languages. Can you please disambiguate this requirement?**

    The term "base languages" does mean C/C++/Fortran. Given DOE's interest in integrating AI with traditional modeling/simulation applications, we are asking if any interfaces exist to incorporate ML libraries/frameworks into applications using the base languages. If some exist and will be provided, please describe them.

12. **In section H, you list an e-mail for benchmark questions: OLCF6benchmarks@ornl.gov. Should we send any benchmark questions to this e-mail? Or do they go to the OLCF6-RFP email address?**

    All questions should go to OLCF6-RFP@ornl.gov.

13. **For the Workflow benchmark the Baseline FOM in the Benchmark Spreadsheet is 40.63 Voxels * Replicas / Second. According to the table in the benchmark description for Workflow (OLCF-6_Workflow_description-7.5.24.pdf) this result was obtained using 100 replicas on 900 nodes of Frontier (so, less than the full system). For the Ported and Optimized FOMs what scale should we run at? Is it correct to fill the proposed system with replicas (or at least keep adding replicas until we reach a limit of scaling)? Or should we run with 100 replicas?**

The Offeror is free to increase the number of replicas and/or nodes to obtain their best FOM.

14. **In Attachment E, Section H.1 (Section 1: Benchmarks, Makefiles, Scripts, and Output Files) we are requested to "include all diffs (e.g., to application source code, makefiles, run scripts) and the application output files" in Volume 7, Section. Can these be returned electronically separately from the Volume 7 Word document (i.e. as a tar file containing all the diffs, makefiles, scripts and output files for each benchmark code), or must they be included as plain text in the Word document itself?**

Electronic return (e.g., a tarball), separate from the Word document, is preferred.

15. **The M-PSDNS benchmark document asks us to provide data on 11 cases (6 single precision, 5 double precision) if possible. However, the RFP spreadsheet has a single cell for M-PSDNS. Which of the 11 cases should be reported in the RFP spreadsheet? Is there a preference to report the single or double precision FOM? The benchmark doc describes flexibility to modify the given cases (mesh size and number of GPUs) to fit the projected system. Is it acceptable to report a modified case in the RFP spreadsheet?**

The Offeror only needs to report two FOMs: one for FP32 and one for FP64, which are the best FOMs they can get for those. They are free to modify mesh size and number of GPUs, if using GPUs, to obtain the best FOMs for these two cases. There are two cells (two rows) in the benchmark spreadsheet, for FP32 and FP64.

The description provides example sizes (and FOMs) that OLCF ran on Frontier. The Offeror does not need to run/project those cases.

16. **In the PEPPI, section H asks for the benchmarks report to be broken into three pieces. Our interpretation of this is that this needs to have all applications in each section. This disrupts the report flow. Would providing each application report in this format but seven separate reports meet the spirit?**

Yes, we agree; it is easier for the reviewers to follow a single benchmark from start to finish. The overall benchmarking report should include each benchmark with the three sub-sections for current benchmark results, optimizations, and projections to future hardware. As mentioned above, a tarball is preferred for the makefiles, diffs, and run scripts. The section responsive to H.1 should explain what is included in the tarball as well as any narrative about the test results.

17. **In RFP Attachment A, there is a requirement for "appropriate information technology security policies and requirements, including use of common security configurations available from the National Institute of Standards and Technology's website at http://checklists.nist.gov." Will OLCF please provide the specific NIST requirements that vendors should align to for this project?**

We expect Offerors to propose many different types of architectures. The hardware and software components included in these responses will have different security considerations depending on function. Unfortunately, OLCF cannot provide specific guidance without understanding the system architecture. In general, the OLCF would be interested in information related to how easily the system can be integrated into the rest of the OLCF environment which operates at a FIPS Moderate baseline. The URL provided contains a way to search for Security Technical Implementation Guides (STIGs) to help Offerors see the types of security controls that can be implemented/configured for various hardware and software products.