Date: February 6, 2017

TO: ALL PROSPECTIVE RESPONDENTS:

Subject: Request For Information (RFI) No. 01-ECP-2017

UT-Battelle, LLC, the Management and Operating Contractor of the Oak Ridge National Laboratory (ORNL) under prime contract DE-AC05-00OR22725 with the US Department of Energy (DOE) hosts the DOE Exascale Computing Project (ECP) office. The ECP with its associated DOE laboratories: Argonne National Laboratory (ANL), Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), ORNL, Sandia National Laboratories (SNL) and Lawrence Berkeley National Laboratory (LBNL) are collaborating in the issuance of a Request for Information (RFI) to inform the next round of DOE system acquisitions and associated research and development activities. The ECP is performing a market survey to evaluate obtaining products and services that are the subject of this RFI. Therefore, you are invited to submit a response to this RFI to provide the supplies and services outlined below. This RFI is for informational purposes only and may not necessarily result in a solicitation or award of a contract.

PROJECT: NEXT GENERATION COMPUTER ACQUISITION

The purpose of this RFI is to provide the ECP and its associated laboratories with information for the creation of several requests for proposals (RFPs) related to the first U.S. exascale system acquisitions:

- Technology advances that could be integrated into exascale systems between 2021 and 2025 will inform a PathForward-II RFP that is planned to be issued in FY 2017. This information will also help the ECP create a richer exascale ecosystem since the DOE plan is for one system delivered in 2021, and two systems delivered in 2022. At least one (and perhaps both) of the 2022 systems will be diverse from the 2021 system.
- Characteristics of exascale systems that could be delivered in 2021, 2022/2023, and 2024/2025 will inform up-coming 2021 and 2022 systems acquisition RFPs and non-recurring engineering (NRE) contracts that would benefit systems through 2025. Associated NRE funds may begin in early 2019.
- System providers’ description of their software stack and their roadmap for software through 2025 will be used in a Software Technology gap analysis and a potential follow-on PathForward RFP to close any software gaps.

Attachment 1, “Exascale Systems” provides further details.

Your written response should include written materials describing your answers to the questions in the attachment along with any other information deemed informative that will help us structure the upcoming RFPs.

Additionally, responses may include proprietary information. Respondents should indicate on the fore page, and all subsequent pages of their response to this RFI, those sections, paragraphs, or areas that they consider to be proprietary or otherwise consider confidential. The laboratories and DOE assume no liability for disclosure or use of unmarked data, and may use or disclose such data for any purpose. Unless restricted, information submitted in response to this RFI and subsequently used for procurement purposes may become subject to public disclosure pursuant to the provisions of the "Freedom of Information Act."
Information provided to ORNL will be shared with the collaborating laboratories and DOE. The information provided may be discussed in any combination between the members of the collaboration and DOE. The companies that the RFI responses will be shared with are as follows:

- UChicago Argonne, LLC - managing and operating contractor of Argonne National Laboratory
- Los Alamos National Security, LLC - managing and operating contractor of Los Alamos National Laboratory
- University of California - managing and operating contractor of Lawrence Berkeley Laboratory National Laboratory
- Lawrence Livermore National Security, LLC - managing and operating contractor of Lawrence Livermore National Laboratory
- UT-Battelle, LLC - managing and operating contractor of Oak Ridge National Laboratory
- Sandia Corporation - managing and operating contractor of Sandia National Laboratories

**Intellectual Property**

It is anticipated that DOE will grant a class advance patent waiver for these Next Generation Computer Acquisitions. Upon receipt of the explicit language of the waiver, this language will be incorporated into the upcoming request for proposals. The associated awards will include intellectual property provisions consistent with the waiver. In general, the waiver will allow an awardee that is an other-than-small business not organized as for-profits (and universities), and any first tier subcontractor of that awardee, to assert copyright to its works of authorship and to elect title to its subject inventions without prior approval from the Government.

Cost sharing is a condition of the class advance patent waiver for a large business awardee. A large business must fund an amount still to be determined of the total price of performance under its subcontract to have the intellectual property provisions reflecting the class advance patent waiver language included in resultant subcontract(s).

A large business awardee that desires a lower cost share percentage or different terms than those granted in the class advance patent waiver will be required to negotiate directly with DOE. However, those negotiations would be time consuming and may not allow the DOE Laboratories to maintain their schedule. As a result, the DOE Laboratories may view the proposal less favorably than a proposal from another Offeror that is willing to cost share and accept the class advance patent waiver provisions as is.

Small businesses or non-profit entities that may be selected for award should note that the class advance patent waiver provisions for patents will not be included in a subcontract. By statute, a small business and non-profit may elect title to its subject inventions without prior approval from the Government.

Foreign owned or controlled awardees and proposed foreign owned or controlled subcontractors to an awardee at any tier may not be covered by the class advance patent waiver. These entities will be subject to the existing FAR and DEAR intellectual property requirements.

Any questions regarding the RFI must be sent to the undersigned by **March 17, 2017**. Questions will be consolidated and the answers will be posted at [http://procurement.ornl.gov/rfp/Exascale-rfi/](http://procurement.ornl.gov/rfp/Exascale-rfi/) It is your responsibility to check this page for new information.

Responses to this RFI are due no later than 5:00 PM EDT on or before **March 31, 2017**. Contractors may submit up to two responses to this RFI. If submitting more than one response, the systems described must be substantially different. Responses shall not exceed 50 pages (each), including all attachments.

Responses as well as questions about the RFI should be submitted electronically to William R. Besancenez at [besancenezwr@ornl.gov](mailto:besancenezwr@ornl.gov). Please Reference: RFI No. **01-ECP-2017** on all transmittals related to this RFI.
Please note that all responses to this RFI will be nonbinding. Also, this RFI does not commit the Exascale Computing Project and/or the Government to pay any cost for the preparation and submission of any information in response to this RFI.

Sincerely,

Wm. R. Besancenez

William R. Besancenez
Group Leader
Acquisition Management Services Division

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