

OAK RIDGE NATIONAL LABORATORY

MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

Attachment 1, CORAL-2 RFP Cover Letter

W. R. Besancenez
P.O. Box 2008
Oak Ridge, TN 37831-6164
Ph: (865) 576-1538 Fax: (865) 241-4082
Email: besancenezwr@ornl.gov

April 9, 2018

Attention: All Interested Offerors

Subject: CORAL-2 Request for Proposal (RFP) Number 6400015092

Proposal Due: **May 24, 2018, 5:00 pm Eastern Time**

OVERVIEW

The Department of Energy's (DOE's) Office of Science (SC) and National Nuclear Security Administration (NNSA) are collaborating to acquire non-recurring engineering (NRE) and up to three exascale High Performance Computing (exascale HPC) systems. This collaboration, known as CORAL, involves Argonne National Laboratory (ANL), Lawrence Livermore National Laboratory (LLNL), and Oak Ridge National Laboratory (ORNL), which are collectively referred to as the Laboratories herein.

In accordance with this Request for Proposal (RFP) and the attached subcontract documents, the Laboratories seek proposals that are to result in CORAL-2 machine build awards and associated CORAL-2 NRE awards. (Throughout the RFP, awards for systems are described as the build award, machine build award, system award, and CORAL-2 Build subcontract. These terms are interchangeable.)

The exascale HPC systems described in the RFP are as follows:

Laboratory	Description
ORNL	System delivered in 2021 and accepted in 2022 (ORNL system)
LLNL	System delivered in 2022 and accepted in 2023 (LLNL system)
ANL	Potential System delivered in 2022 and accepted in 2023 (ANL system)

As noted in the table, the system for ANL is described as a "Potential System delivered ..." ANL may or may not choose to make an award under this RFP. Also, regardless of which system or systems are being discussed, the systems residing at or planned to reside at ORNL and ANL must be diverse from one another.

These systems are required to meet the mission needs of the Advanced Scientific Computing Research (ASCR) Program within the DOE's SC and the Advanced Simulation and Computing (ASC) Program within the NNSA.

DOE SC's ASCR Program has a requirement that ORNL and ANL systems must always be diverse from one another. ANL has a system planned for acceptance in 2021 called "A21," which is outside this RFP. Consequently, the ORNL system must be diverse from the A21 system. The LLNL system can be the same as the ANL system, the same as the ORNL system, or a different system altogether.

Diversity will be evaluated by how much the proposed system(s) promotes a competition of ideas and technologies; how much the proposed system(s) reduces risk that may be caused by delays or failure of a particular technology or shifts in vendor business focus, staff, or financial health; and how much the proposed system(s) diversity promotes a rich and healthy HPC ecosystem.

In response to this RFP, Offerors may submit only one proposal for the ORNL system to be delivered in 2021 and one proposal for the LLNL system to be delivered in 2022 (ANL will select from the latter set of

proposals). If the 2021 and 2022 systems are very similar, Offerors may submit a single proposal that covers both systems.

The delivery and acceptance timing provided above represents the current outlook and alignment of programmatic requirements and funding. However, ORNL reserves the right to make an award based on the proposals for the 2022 system.

NRE

NRE is a risk mitigation to ensure successful deployment of the systems. NRE is envisioned to reduce the risk of deploying future technologies that will support the systems on the schedule required by the Laboratories.

As many as three NRE awards are possible; one to each recipient of a system award. However, should LLNL choose the same build awardee as ANL or ORNL, LLNL may also choose to team with ANL or ORNL to award a single NRE award in support of the build awards. Regardless of which laboratory makes the award, the NRE required for LLNL's system will be provided by the vendor that provides the system to LLNL. The NRE awards may be made by ORNL, LLNL, and ANL individually or collectively.

REQUEST

UT-Battelle, LLC (UT-Battelle), as the managing and operating contractor of ORNL, is issuing the CORAL-2 RFP on behalf of CORAL. UT-Battelle requests proposals for CORAL-2 NRE and CORAL-2 machine build in accordance with this RFP and the enclosed subcontract documents. Proposals must be valid for at least one (1) year after the proposal due date.

Acceptance of late proposals will be at the sole discretion of UT-Battelle. The Laboratories reserve the right to (1) make selections on the basis of initial proposals; (2) choose any proposal for their respective individual awards; (3) negotiate with any or all Offerors for any reason; (4) award subcontracts to one or more Offerors; (5) award subcontracts based on all or part of an Offeror's proposal, including any options contained in the proposal; (6) reject any or all proposals and make no award; (7) waive any minor irregularities in any proposal; (8) allow one (or more) individual laboratory to not make an award; and (9) cancel this RFP.

Proposal preparation costs will not be reimbursed.

The UT-Battelle Procurement Officer is William (Willy) Besancenez who may be reached by telephone at (865) 576-1538 or by e-mail at CORAL2-Team@ornl.gov.

This RFP letter and all of its associated documents are at the following URL: <http://procurement.ornl.gov/rfp/CORAL2/>. Interested Offerors are requested to provide a contact name, phone number, and email address to Mr. Besancenez, via email no later than **April 27, 2018**. Offerors are responsible for monitoring the website for all amendments, questions and answers, and updated information related to this procurement.

FUNDING AND PROPOSED FINANCING

Funding is not presently available. The Laboratories anticipate funding from DOE SC and NNSA to become available in a manner that will allow the selected Offerors to perform continuously until completion.

The anticipated budget range for each system, including any associated NRE, is \$400M to \$600M. The budget range for NRE alone is expected to be \$75M to \$150M. However, the actual NRE or system award amount may be more or less than the anticipated budget, depending on the Laboratories' perceived value of the proposal(s), resulting negotiations, and annual appropriated funding from Congress.

The Awardee will not be obligated to perform, and the Laboratories will not have any obligation to pay for, work done under the resulting contracts until and unless the Laboratories issue direction to perform work or provide other unambiguous commitment(s) to pay the Awardee.

ORNL intends to pay for its machine by using third-party Lease-To-Own (LTO) financing as provided in the Sample Lease Agreement that is included as part of this RFP. ORNL may choose to exercise the option for third-party leasing in the Draft Lease Agreement.

LLNL intends to pay for its machine using direct funding; however, LLNL reserves the right to use third-party LTO financing for a portion of its machine, depending on annual appropriated funding from Congress.

ANL intends to pay for its machine using third-party LTO financing. ANL's LTO Sample and the Master Lease Agreement apply only if the successful Offeror can offer mutually acceptable financing options.

RFP STRUCTURE AND LABORATORY SPECIFIC TERMS AND CONDITIONS

The RFP includes the documents shown in the table at the end of this letter.

All documents should be read to be consistent and in a manner to give meaning to all terms and conditions included in the documents. If the Offeror believes there is an inconsistency in any terms and conditions, Offeror must bring the issue to the attention of the UT-Battelle Procurement Officer prior to submitting a proposal.

NAICS CODES AND SMALL BUSINESS SIZE STANDARD

NRE Awards

The North American Industry Classification System (NAICS) Code for the NRE awards is 541715, Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology). The corresponding small business size standard for this acquisition is 1,000 or fewer employees.

The Offeror must base its Small Business Program Representations in the attached NRE Representations and Certifications form on this small business size standard. Refer to Subpart 19.1 - Size Standards of the Federal Acquisition Regulation (FAR) for information on calculating annual average gross revenue.

Machine Build Awards

The NAICS Code for this acquisition is 334111, Electronic Computer Manufacturing. The corresponding small business size standard for the machine build awards is 1,250 or fewer employees.

The Offeror must base its Small Business Program Representations in the attached machine build Representations and Certifications form on this small business size standard. Refer to Subpart 19.1 - Size Standards of the Federal Acquisition Regulation (FAR) for information on calculating number of employees.

INTELLECTUAL PROPERTY

It is anticipated that DOE will grant a class advance waiver on intellectual property for CORAL-2 NRE. Upon receipt, UT-Battelle will amend this RFP to include the waiver. In general, the waiver will allow an awardee that is a large business, 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 waiver for a large business awardee. A large business must fund at least 40% of the total price of performance under its subcontract to have the class advance waiver language included in any resulting award. Offerors that are large businesses must make a specific assertion accepting the 40% share (or offering to share more than 40%) to obtain the terms of the class advance waiver. Offerors that are large businesses that do not accept the 40% share and are selected for award will be subject

to the FAR and DOE Acquisition Regulations intellectual property clauses in the terms and conditions incorporated in the Sample Subcontracts.

A large business Offeror seeking a class advance waiver who proposes a cost share percentage below 40% or otherwise different terms than those stated will be required to negotiate directly with DOE. Due to schedule constraints and the potential delay those negotiations may take, and the resulting impact to the CORAL-2 award schedule, Laboratories may view the Offeror's proposal less favorably than a proposal from an Offeror who accepts the cost sharing as proposed.

Offerors that are small businesses or nonprofit entities should note that the class advance waiver provisions for patents will not be included in a subcontract. By statute, a small business may elect title to its subject invention without prior approval from the Government.

Foreign-owned or controlled Offerors and proposed foreign-owned or controlled subcontractors to an Offeror at any tier are not eligible to receive the class advance waiver provisions. These entities will be subject to the existing FAR and DEAR intellectual property clauses in the terms and conditions incorporated in the Sample Subcontracts.

PROPRIETARY INFORMATION

The Laboratories and DOE will treat all properly marked commercial, financial, or technical information submitted in response to this RFP as proprietary information. Proper marking requires that each page containing proprietary commercial, financial or technical information be marked "Proprietary" or its equivalent. The Laboratories and DOE assume no liability for disclosure or use of unmarked data and may use or disclose unmarked data for any purpose. Unless restricted, information submitted in response to this RFP and subsequently used for procurement purposes may become subject to public disclosure pursuant to the provisions of the Freedom of Information Act.

The Laboratories will make their best efforts to (1) maintain such proprietary information in confidence, giving it the same degree of care, but no less than a reasonable degree of care, as the Laboratories exercise with their own proprietary information to prevent its unauthorized disclosure; and (2) only disclose such proprietary information to their employees, agents, consultants, or subcontractors on a "need-to-know" basis.

To assist in the evaluation process, Offerors agree that the Laboratories can disclose proprietary information to personnel at LANL, LBNL, and SNL. Proprietary information provided to the Laboratories may be discussed in any combination between the Laboratories, the following additional laboratories, and the Government. The managing and operating contractors for each laboratory are as listed:

- UChicago Argonne, LLC - managing and operating contractor of Argonne National Laboratory (ANL)
- University of California - managing and operating contractor of Lawrence Berkeley National Laboratory (LBNL)
- Lawrence Livermore National Security, LLC - managing and operating contractor of Lawrence Livermore National Laboratory (LLNL)
- Los Alamos National Security, LLC - managing and operating contractor of Los Alamos National Laboratory (LANL)
- UT-Battelle, LLC - managing and operating contractor of Oak Ridge National Laboratory (ORNL)
- National Technology and Engineering Solutions of Sandia, LLC - managing and operating contractor of Sandia National Laboratories (SNL)

In addition to the above, the Offeror agrees that from time to time, consistent with the terms of the Laboratories' prime contracts with the Government, the Laboratories may release proprietary information to

Government personnel who administer these prime contracts. Government personnel in receipt of proprietary information are subject to confidentiality requirements pursuant to 18 U.S.C. §1905.

OFFEROR QUESTIONS

UT-Battelle will respond to questions submitted in writing to the UT-Battelle Procurement Officer on or before **Wednesday, May 16, 2018**. Questions will not be accepted after **Wednesday, May 16, 2018**. Questions must be submitted via email to CORAL2-Team@ornl.gov. Answers to questions that are germane to the interpretation of CORAL-2 requirements will be posted to the CORAL-2 RFP web site for viewing by all potential Offerors. Answers to questions that are specific to the interpretation of CORAL-2 requirements and are based on an Offeror's competitive bid strategy or proprietary information will only be provided to the Offeror who submitted the question(s). In all cases, UT-Battelle will determine what questions and answers (Q&A) will be posted to the CORAL-2 RFP web site and what Q&A will be provided only to the Offeror who submitted the question(s).

SUBMITTING PROPOSALS

Offerors **MUST** submit proposals to UT-Battelle's Procurement Officer at CORAL2-Team@ornl.gov.

Submission of a proposal(s) indicates the Offeror's willingness to accept the terms and conditions of the Sample Subcontracts and their attachments unless specific exceptions are made. These terms and conditions have been approved by the DOE/NNSA. Failure to accept the terms and conditions may result in significant, unacceptable delays in award of the subcontracts, which could cause the Laboratories to reject an Offeror's proposal.

Electronic copies of the complete proposal must be submitted in Microsoft Office 2007 or later (Word, Excel, PowerPoint, Project), PDF format, or Rich Text format. Individual folder and file names are to include the name of the Offeror's company. Paper copy proposals are not required. Submission of a proposal by electronic media will be considered by UT-Battelle to be an Offeror's certification that the media are virus free. Electronic files up to 25MB can be received via UT-Battelle's email system. Files may be zipped and compressed.

Proposals are due to UT-Battelle's Procurement Officer on **May 24, 2018 by 5:00 pm Eastern Time**. Facsimile proposals are not acceptable.

If you have any questions, please contact:



William R. Besancenez
Procurement Manager
UT-Battelle, LLC
Email: besancenezwr@ornl.gov
Phone: (865) 576-1538

Documents applicable to the CORAL-2 RFP:	
General RFP Documents	
RFP Cover Letter	
Proposal Evaluation and Proposal Preparation Instructions	
CORAL 2 Build Statement of Work	
Price Schedule	
Benchmark Results	
Summary Matrices	
Laboratory Specific Documents	
<u>ANL Specific Build Contract Documents</u>	<u>ANL Specific NRE Contract Documents</u>
Sample CORAL-2 Build PO	70B Reqs & Certs
Appendix A-701COM	Appendix A-Fixed Price
Appendix D Intellectual Property Provisions	Certificate
On-Site Work (Mod)	Special CI Contractor Code
Sample Appendix A-1 Amendment CORAL-2 RFP	Special CI SB Subcontracting Plan
Special CI-Contractor Code	Special CI CAS 1
	Special CI CAS 2
	Special CI CAS 4
	Special CI Inspection 4
<u>LLNL Specific Build Contract Documents</u>	<u>LLNL Specific NRE Contract Documents</u>
B626589 Sample Build Subcontracts	B62688 Sample NRE Subcontract
Commercial Domestic GP's	FP Supplies-Services – Domestic GPs
Access to LLNL Computer Resources Provisions	Model Small Business Subcontracting Plan
Security Site Access Provisions	Access to LLNL Computer Resources Provisions
Injury & Illness Reporting Provisions	Security Site Access Provisions
WSAPP Certification (With TDPs) (Type 3)	Injury & Illness Reporting Provisions
CFR 851 Worker Protection Poster	WSAPP Certification (With TDPs) (Type 3)
Representations & Certifications Form	CFR 851 Worker Protection Poster
	Representations & Certifications Form
	CAS Notices & Certifications
	COPD Certificate
	FAR Table 15-2 COPD Submittal Instructions
<u>ORNL Specific Build Contract Documents</u>	<u>ORNL Specific NRE Contract Documents</u>
Draft Lease Agreement	Draft NRE Subcontract
General Terms & Conditions, Commercial Items	General Terms & Conditions, Fixed Price
Exhibit 9, Technical Data	EEO Pre-Award Clearance Request
Technical Directions	Exhibit 2, Representation of Limited Rights Data and Restricted Computer Software
Representations & Certifications	Cost Accounting Standards Notices and Certification
Exhibit 2, Representation of Limited Rights Data and Restricted Computer Software	Cost Accounting Standards Clause
Exhibit 2D Refund of Royalties	Certificate of Current Cost or Pricing Data
	Exhibit 1B Patent Rights – Acquisition by the Government
	Exhibit 1C Patent Rights – Retention by the Seller
	Exhibit 2D Refund of Royalties
	Exhibit 4, Authorization and Consent
	Exhibit 9, Technical Data
	Small Business Subcontracting Plan
	Representations & Certifications