



DEPARTMENT OF THE NAVY
NAVAL RESEARCH LABORATORY
4555 OVERLOOK AVE SW
WASHINGTON D C 20375-5320

IN REPLY REFER TO:

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

1. The Department of the Navy, contracting through the Naval Research Laboratory, proposes to enter into a contract on other than a full and open competitive basis.
2. Nature and/or description of the action being approved.

The Naval Research Laboratory's Center for Computational Science (CCS) intends to procure additional chilled water heat exchanger pumping stations. These units will be installed in the Center for Computational Science's state-of-the-art computational facility that currently houses in excess of \$35M worth of assets. The mission of the CCS is to provide the Navy community with access to leading edge, high-performance supercomputing and communications (HPCC) capabilities and to provide research production computational services. The Center serves NRL, the Office of Naval Research, and numerous other clients within the Department of Defense. NRL's CCS participates as a partner in the DoD's High Performance Computing Modernization Program (HPCMP) and in the Defense Advanced Research Projects Agency (DARPA) sponsored National Consortium (NCHPC) as well as interacting with National Aeronautics and Space Administration (NASA) and the National Science Foundation (NSF) meta-center sites nationwide. Most importantly, the CCS provides support to researchers nationwide to solve real world problems by maintaining a balanced focus on service, research, and development. One goal of the Center is to make all leading edge resources available to the community as close to 24/7 as possible. In order to accomplish this goal, NRL/CCS must have reliable equipment and a competent maintenance contractor in order to minimize any potential downtime disruption.

3. Description of the supplies or services required to meet the needs of the Naval Research Laboratory including the estimated value.

The NRL CCS has a requirement for (a) Two (2) Libert XDWPs (CDU) Pumping Stations, model number CDU100C-A000; and (b) all associated labor and installation.

The estimated cost of this requirement is \$143,000.

- 3.1. A statement of delivery requirements (*e.g., include a list of ships and/or shore activities and required delivery dates for each*). *If only labor hours or a final report are to be delivered, enter the performance period.*

This requirement is funded by Lab G&A funds that expire on 30 Sept 2009. Hardware delivery is desired on 18 Sept 2009 so that installation can be completed prior to 30 Sept 2009.

3.2. The total estimated dollar value (including all options) for the acquisition(s) covered by the justification.

FY2009 \$143,000.

4. Identification of the statutory authority permitting other than full and open competition.

10 U.S.C. 2304 (c)(1), FAR 6.302-1 – Only one responsible source and no other supplies or services will satisfy agency requirements.

5. Demonstration that proposed contractor's unique qualifications or nature of the acquisition requires use of the authority cited.

The desired Liebert Pumping stations are presently the only identical ones that interconnect to the existing pumping stations, manifolds, booster pumps, the chemical ion exchange purifier unit, and the HVAC control software that is installed in the NRL CCS supercomputer facility. No other type will satisfy agency requirements without a complete fork lift upgrade and demolition of existing installed facilities.

The equipment must be capable of interfacing with all existing computer HPCC hardware, mechanical devices and similar HVAC support components, which include multiple air handlers, seven power distribution and conditioning systems, an uninterruptible power supply, two chilled water pumping stations, manifolds, booster pumps, the chemical ion exchange water purifier and a computer monitoring system that links HVAC to power conditioning to building alarms to alert critical HPC systems for emergency shutdown.

6. A description of efforts made to ensure offers are solicited from as many potential sources as is practicable including whether a synopsis notice was or will be publicized.

The requirement appeared on the website on August 7, 2009.

7. Determination by the Contracting Officer that the anticipated cost to the Government will be fair and reasonable.

Before awarding a cost-type contract, the Contracting Officer will perform a cost analysis in accordance with FAR 15.404-1(c) to determine whether the estimated contract amount is fair and reasonable; Or in the case of a fixed-price contract, the Contracting Officer will perform a price analysis in accordance with FAR 15.404-1(b) (and a cost analysis, if required) to determine whether the price is fair and reasonable.

8. Description of the market research conducted and results or statement of the reasons a market research was not conducted.

The COR/ARO is fully cognizant of the equipment/expertise in this scientific field and to the best of his knowledge, no other manufacturers can meet our minimum requirements. NRL Code 5590 considered other manufacturers, but due to the complexity of our computer environment, the OEM, Liebert, carries the only system that will interface with all of the Center's existing equipment.

9. Any other facts supporting the use of other than full and open competition:

This is a brand name requirement that can be fulfilled by numerous contractors.

Unless we are permitted to limit the number of sources from which to solicit bids or proposals, we will have to delay the delivery of NRL's newest supercomputer, the SGI next generation x86 Nehalem based Integrated Computing Environment: ICE2. NRL's new supercomputer is scheduled to be delivered on or before 01 October 2009. This computer cannot be brought up without the proper tonnage air conditioning units to support it without causing internal heat generated damage. Delay in bringing up the computer will postpone Government acceptance, causing NRL to pay interest charges and additional depreciation charges while awaiting a proper temperature-controlled environment. NRL researchers also expect to deploy ICE2 as a remote data source for NRL HPC demonstrations scheduled for SC'09 in mid-November.

10. A listing of the sources, if any, who expressed, in writing an interest in the acquisition.

The two sources that the COR is currently aware of who can meet this requirement are: CTS Services and Alliance Micro. Others likely exist but are unknown to the end user.

11. A statement of the actions, if any, the agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required.

This is a one-time purchase.

**TECHNICAL AND REQUIREMENTS CERTIFICATION
REQUIRED BY FAR 6.303-2(b)**

I certify that the facts and representations under my cognizance which are included in this justification which form a basis for this justification are complete and accurate.

Technical Cognizance

(Signature) Henry D. Dandy 5590.3 17 Aug 2009
Code Phone Date

Requirements Cognizance

(Signature) [Signature] 5590 17 Aug 2009
Code Phone Date

LEGAL COUNSEL REVIEW:

(Signature) [Signature] 1008 12 Aug 09
Code Phone Date

CONTRACTING OFFICER CERTIFICATION REQUIRED BY FAR 6.303-2(a)(12)

I certify that this justification is accurate and complete to be best of my knowledge and belief.

(Signature) Brenda J. Burke 8/7/09