WASTE TREATMENT PLANT PROJECT REQUEST FOR INTEREST

CHILLER MAINTENANCE AND TECHNICAL SUPPORT

Requisition Number: 24590-CM-SRA-MERK-00001

Submit Interest By: September 10, 2020

Quality Level: CM

Award Type: TIME AND MATERIALS

ESTIMATED SCHEDULE

Issue Request for Proposal: TBD Award and Notice to Proceed: TBD

PROJECT DESCRIPTION AND LOCATION

The Hanford Tank Waste Treatment and Immobilization Plant (WTP) is a complex of radioactive waste treatment processing facilities designed and constructed by Bechtel National, Inc. for the Department of Energy (DOE). The facility will process the Hanford Site tank waste and convert the waste into a stable glass form.

The Project site is located in the 200 East Area of the Hanford Reservation near Richland, Washington, along the Columbia River. The site elevation varies from 662 to 684 feet above mean sea level. Ambient temperature range is -23 degrees F minimum to 113 degrees F maximum, with relative humidity of 5% minimum to 100% maximum. The project design life is 40 years.

Many of the systems for the DFLAW configuration have been delivered and installed, for years in some cases, but the systems have not been in normal operations. For the installed systems, there is a possibility that system lay-up and routine maintenance and preservations for system components may not have been performed to strict maintenance requirements due to being in a construction environment for an extended period due to delays in design and construction. Such is the case for the chiller compressor system of DFLAW.

The WTP chillers are York YK, style F, chillers with model and serial numbers for the DFLAW plant configuration covered by this scope of work for the Component Tag Numbers (CTNs) as follows:

- CHW-CHU-00001-A: Model: YKTFTBJ2-DCF, S/N: SAPM-659900
- CHW-CHU-00001-B: Model: YKTFTBJ2-DCFS, S/N: SBPM-661610
- CHW-CHU-00001-C: Model: YKTFTBJ2-DCFS, S/N: SBPM-661280
- CHW-CHU-00001-D: Model: YKTFTBJ3-DHFS, S/N: SBPM-661440
- CHW-CHU-00001-E: Model: YKTFTBJ3-DHFS, S/N: SBPM-661110
- CHW-CHU-00001-F: Model: YKTFTBJ3-DHFS, S/N: SAPM-657930

This scope of work covers three different categories of work; 1. Technical Support and Trouble Shooting; 2. Planned Preventative Maintenance; and 3. Emergent Repairs

SCOPE OF WORK

SUBCONTRACTOR shall provide technical support services for troubleshooting and maintenance of the chillers. Vendor drawings and other chiller equipment information will be provided in the Request for Proposal (RFP) package. This scope of work is inclusive to DFLAW operations supporting commissioning, and operations activities.

SUBCONTRACTOR shall provide all labor, materials, equipment, tools, transportation, and supplies necessary to perform maintenance of the chillers and the following applies:

- 1. The term maintenance includes activities of design, troubleshooting, disassembly, inspection, repair, reassembly, replacement, post assembly functional testing prior to re-installation, and submission of documentation of maintenance activities as required to maintain the chillers operational.
- 2. All maintenance activities shall be performed as required by OEM or good industry practices and compliant with the Codes and Standard specified in the Scope of Work.

CHILLER TECHNICAL SUPPORT AND TROUBLESHOOTING

SUBCONTRACTOR shall provide technical support services as required by the CONTRACTOR for troubleshooting and maintenance for chillers (including support of manufactured subcomponents). The SUBCONTRACTOR support will be both off-site and on-site following a planning meeting to be held at the CONTRACTOR's site. The planning meeting and support are defined as follows:

Planning Meeting

Two weeks after award SUBCONTRACTOR will attend a kickoff meeting held at the CONTRACTOR's site to discuss problems and experience to-date with DFLAW chillers of which the specifications of Exhibit E and general arrangement drawings of Exhibit F relate. During the visit SUBCONTRACTOR will also perform a walkdown with CONTRACTOR of the in-service chillers to discuss the current detail design, Discussions will include configuration of the existing systems and an overview of historical or current issues discovered requiring technical support.

Technical Support

Remote Off-site Support - SUBCONTRACTOR work will primarily be by conference calls in support of troubleshooting from the SUBCONTRACTOR's offices. SUBCONTRACTOR authorized representative(s) proficient with performing this scope of work as the OEM and shall be available to communicate via phone, e-mail or video conference with the CONTRACTOR on an as-needed basis when requested by the CONTRACTOR. Services performed on the SUBCONTRACTOR site are utilized for tasks that can be resolved without the SUBCONTRACTOR needing to be on the WTP construction site. SUBCONTRACTOR is to provide on-call technical support to the CONTRACTOR.

On-site Support – When remote off-site support is not able to resolve problems, SUBCONTRACTOR will be requested to provide on-site support at the WTP construction site. A SUBCONTRACTOR authorized representative shall be provided on the WTP construction site within two (2) days, or at a mutually agreed upon time, from notification by the CONTRACTOR that technical support is necessary. SUBCONTRACTOR work on the WTP construction site shall be flexible on duration to ensure that tasks are resolved in order to meet WTP project needs.

Any alternative components to OEM replacement parts or components recommended by SUBCONTRACTOR must be approved by CONTRACTOR. In the event SUBCONTRACTOR proposes replacements for OEM parts, the basis for recommending the replacement shall be provided and include replacement make/model, part number, and other pertinent information needed to justify the basis. Additionally, the original part information necessary to compare the replacement and confirm the justification is also required. Information will be provided on an Equivalency Determination Form in the RFP package for any deviations or alternative parts from OEM replacement parts. Replacement Item Equivalency Determination Form will include as an attachment a description of the original and replacement make/model, part number, or other identifying information. The attachment shall also describe the replacement part as being considered identical or like-for-like, including basis for the recommendation.

MAINTENANCE AND DESIGN CHANGES

Design change are expected by CONTRACTOR due to obsolescence of the existing chiller components. When design changes are required for maintenance of the chillers it will be communicated to SUBCONTRACTOR through Task Orders included as Attachments to Exhibit D. All Task Order will specify in detail with supporting datasheet and technical drawings of the existing system as applicable and delineate the design changes required. The design change will also specify the required submittals and QVRP documentation necessary for approval, completion and acceptance of design changes.

Any alternative components to OEM replacement parts or components recommended by SUBCONTRACTOR must be approved by CONTRACTOR. In the event SUBCONTRACTOR proposes replacements for OEM parts, the basis for recommending the replacement shall be provided and include replacement make/model, part number, and other pertinent information needed to justify the basis. Additionally, the original part information necessary to

compare the replacement and confirm the justification is also required. Information will be provided on an Equivalency Determination Form for any deviations or alternative parts from OEM replacement parts. Replacement Item Equivalency Determination Form will include as an attachment a description of the original and replacement make/model, part number, or other identifying information. The attachment shall also describe the replacement part as being considered identical or like-for-like, including basis for the recommendation.

PLANNED MAINTENANCE

SUBCONTRACTOR shall perform tube cleaning in support of chiller maintenance as defined in the Scope of Work.

WORK INCLUDED

SUBCONTRACTOR, using their professional expertise in the chiller industry, shall provide technical support as requested by the CONTRACTOR for the DFLAW chillers. This support shall also apply to sub-components of the DFLAW chillers provided by previous Subcontractors.

SUBCONTRACTOR shall be familiar with general maintenance of mechanical, electrical and controls systems for the chillers.

WORK EXCLUDED

No work shall be performed by SUBCONTRACTOR that is not identified in this Scope of Work, or subsequent revisions thereof. SUBCONTRACTOR will be responsible for maintenance of chillers with the following exclusions:

- · Structural modifications to building structure by welding or drilling required in support of maintenance.
- Refrigerant recovery and recharge unless required by Task Order 04 when approved by CONTRACTOR.
- · Platform scaffolding to access the top of the chiller.
- · Refrigerant and refrigerant oil trimming

TECHNICAL CAPABILITY

SUBCONTRACTOR work is expected to meet recognized industry standards of quality for professional work of a similar nature. SUBCONTRACTOR personnel shall have a minimum of 10 years of experience in the installation and maintenance of chillers.

SUBCONTRACTOR shall be knowledgeable with troubleshooting and programming of chiller control systems.

SAFETY

SUBCONTRACTOR may be required to utilize CONTRACTOR-provided scaffolding and/or personnel lifts during maintenance of chillers. SUBCONTRACT will be trained on WTP site safety requirements and comply with all safety requirements for work activities while on site and during elevated work which includes use of lanyards on all tools. SUBCONTRACTOR will meet all applicable safety requirements as defined in Exhibit B.

CONTRACTOR will provide lock-out/tag-out (LOTO) for maintenance of chillers.

QUALITY ASSURANCE (QA) REQUIREMENTS

| Programmatic Qu Jobsite will be: | uality | Assurance (QA) requirements for subcontracts or purchase orders performed in the WTP |
|-------------------------------------|--------|---|
| | Х | Non-Permanent or Temporary Work - Generally no QA program required Commercial Quality - Based on DOE Order 414.1C |
| | | Nuclear Level Quality - Based on ASME NQA-1 2000 |

Bechtel may require, as an element of bidder pre-qualification, submission of a representative sample QA Program or Table of Contents copy. For Nuclear Level Quality subcontracts, the successful bidder's QA Program must be approved prior to award of the subcontract or purchase order.

CODES AND STANDARDS

Industry Codes and Standards referenced below, shall govern chiller maintenance. If a Code or Standard edition or year is not stated for the standard or code below, the latest edition on the effective date of subcontract shall apply. If SUBCONTRACTOR is aware of a significant opportunity by using a later code edition year, SUBCONTRACTOR will inform CONTRACTOR and changes will be assessed on a case-by-case basis.

ANSI/ASHRAE Standard 15-1994, Safety Code for Mechanical Refrigeration

NFPA 70 (1999) National Electrical Code

BIDDER REGISTRATION AND PRE-QUALIFICATION

The BNI Acquisition Services Subcontracts/Purchasing group is responsible for collection, evaluation, and internal publication of potential bidders' information for the purpose of pre-qualifying them to bid on any particular subcontract or purchase order.

As part of this process, BNI requires all potential offerors to register at the Supplier and Contractor Portal at: https://www.Bechtel.com/supplier/

If your company has registered previously, then only supplemental information should be sent to the Bechtel National, Inc. representative noted below.

Information to be provided by potential bidders must include:

- Dun and Bradstreet Number
- Company Name
- Company Address
- Contact Phone Number
- Contact Person
- Email Address
- Safety Data and Information
- Applicable Work Experience and Projects
- Size of Business (Small, Large)

WTP BACKGROUND

Information about the WTP Project can be found on http://www.hanfordvitplant.com

CONTACT

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