

DEPARTMENT OF VETERANS AFFAIRS

Justification and Approval For Other Than Full and Open Competition

1. **Contracting Activity:** Department of Veterans Affairs, VISN 4: James E. Van Zandt VA Medical Center- Station 503.

2. **Nature and/or Description of the Action Being Processed:**

SOLE-SOURCE TRANE CHILLERS: Project 503-11-101 (Mechanical Systems) for the following reasons:

- a. This VAMC currently has a TRANE Tracer Summit Direct Digital Control (DDC) installed. This system regulates building HVAC by throttling controls and is used to regulate climate and energy. At present, the system is not being used to the fullest of its capabilities to save energy and operating costs. The control system has a chiller plant optimization sequence that could be utilized with new TRANE Chillers. As a standard feature, TRANE Chillers ship from the factory with communicating controllers that would interface directly with the existing controls system. A chiller provided by another manufacturer would require the purchase, installation and programming of communicating gateways or converters to properly interface.
- b. TRANE CenTraVac chillers are the only chillers currently in production that utilize a direct drive fully hermetic (fully sealed) compressor and motor construction (made possible by the use of low pressure refrigerant). All other manufacturers use a gear drive adding more moving parts to maintain and possibly fail. Some manufacturers utilize an open motor design that requires shaft seals along the drive shaft to prevent leaking of refrigerant into the mechanical space. Because TRANE machines are direct drive; there are no gear boxes, couplings, or extra shafts to maintain or replace. This saves money over the life of the chiller. Because the machines are fully hermetic there are no shaft seals that could fail and result in refrigerant leaks.

- c. The TRANE CenTraVac chillers also rotate at an industry low 3600 rotations per minute (RPM), again made possible by the use of low pressure refrigerant. The lower rotation speed causes the machine to be more reliable and also more stable and quiet in operation, which can be a large energy saver.
- d. Because TRANE is currently the only chiller manufacturer utilizing low pressure refrigerant, purchasing any other chiller would require the purchase and storage of new high-pressure refrigerant. A new TRANE chiller would utilize the same low pressure refrigerant as the existing TRANE CenTraVac that will remain. In addition, to only require the purchase and storage of one type of refrigerant, our HVAC mechanics would only have to be trained and familiar with the operation of low pressure machines. Low pressure refrigerant is offered by TRANE only. Ordering multiple pressure refrigerants would require extensive monitoring technology. The anticipated cost of the replacement units according to the independent Government Estimate provided by the Architect Engineer responsible for the design is \$324,000.00

3. Description of Supplies/Services Required to Meet the Agency's Needs:

The following work is required:

- a. REPLACE EXISTING 400 Ton MCQUAY CHILLER, Serial No. 55D0010600, Model No. E26124821A, Style: 059244301E: Background: The Medical Center has two 400 ton chillers. The older (McQuay) Chiller needs to be replaced with a minimum of two (2) new 400 ton chillers, to compliment the one (1) existing 400 ton chiller. The three (3) chillers shall communicate with each other to minimize energy usage. Also, the existing Piping, Pumps and Cooling Tower has been re-sized to handle new load(s).
- b. The A/E has designed a Plate and Frame Heat Exchanger System: This type system on the Chilled Water Loop utilizes metal plates to transfer heat between two fluids, and would have a major advantage over a conventional heat exchanger since the fluids are exposed to a larger surface area. Thus energy resources would be reduced.
- c. EXISTING DDC: At present, existing Trane Tracer DDC system ties into existing Air Handlers and Chillers. Insure that this DDC system is tied into new HVAC that replaces the above.

4. Statutory Authority Permitting Other than Full and Open Competition:

- (X) (1) Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements per FAR 6.302-1;
- () (2) Unusual and Compelling Urgency per FAR 6.302-2;
- () (3) Industrial Mobilization, Engineering, Developmental or Research Capability or Expert Services per FAR 6.302-3;
- () (4) International Agreement per FAR 6.302-4
- () (5) Authorized or Required by Statute FAR 6.302-5;
- () (6) National Security per FAR 6.302-6;
- () (7) Public Interest per FAR 6.302-7;

5. Demonstration that the Contractor's Unique Qualifications or Nature of the Acquisition Requires the Use of the Authority Cited Above (applicability of authority):

- a. Another chiller manufacturer will not be able to utilize the existing TRANE Tracer Summit Direct Digital Control for HVAC and Energy management to the fullest extent.
- b. A Direct Drive Fully Hermetic Compressor is provided only by TRANE. A Gear Drive provided by other manufacturers require more maintenance, increasing the possibility of leaking refrigerant.
- c. Industry-Low rotation of TRANE chillers provides for increased energy savings.
- d. Low pressure refrigerant provided by TRANE will result in storage of only one type refrigerant.

6. Description of Efforts Made to ensure that offers are solicited from as many potential sources as deemed practicable:

VA would readily accept any chiller manufacturer that could provide: a.) Full usage of existing TRANE DDC system. b.) A Direct Drive Fully Hermetic Compressor. c.) Low RPM rotation. d.) Low pressure refrigerant.

7. Determination by the Contracting Officer that the Anticipated Cost to the Government will be Fair and Reasonable: *The anticipated cost will be considered fair and reasonable based on the computation received from the various bids received. Based on the market research for this NAICS Code there are approximately 26 SDVOSB contractors located within 175 miles (within the state) of the facility and approximately 584 SDVOSB contractors nationwide that will provide for adequate completion that should provide for a fair and reasonable price.).*

8. Description of the Market Research Conducted and the Results, or a Statement of the Reasons Market Research Was Not Conducted:

The Architect/Engineer has provided information regarding the performance characteristics of the chiller system as detailed in Item 5 above. They have researched three (30 different manufactures – (Trane, Carrier, and McQuay), the

attached document indicates the comparison of the performance data researched, and it seems that the Chiller System offered by Trane will have few advantages over the other manufacturers. The Architect/Engineer recommends the installation of the TRANE Chiller as it will be more beneficial for the VA Medical Center due to the following reasons;

- a. Control and Monitoring of new and existing chillers will be made much easier utilizing the existing TRANE TRACER controls.
- b. Single Point of Contact for Repair and Maintenance of existing system.
- c. The familiarity of the existing TRANE TRACER System by VA Maintenance personnel will save time and dollars. The current staff will not require training to learn and maintain a new system.
- d. Less Training will be required for VA Maintenance Staff.
- e. The TRANE Chiller is more efficient than the other chillers both at full and partial load conditions, that will afford the VA cost saving.

9. Any Other Facts Supporting the Use of Other than Full and Open Competition:

TRANE has an outstanding field service representative who is local. This representative is familiar with all chiller related mechanical equipment at this VAMC. The few problems encountered over the years were resolved quickly and at reasonable cost.

10. Listing of Sources that Expressed, in Writing, an Interest in the Acquisition:

The project described in Item 3 above is in the design stage, thus no bidders have been solicited yet.

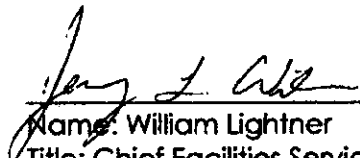
11. A Statement of the Actions, if any, the Agency May Take to Remove or Overcome any Barriers to Competition before Making subsequent acquisitions for the supplies or services required:

This VAMC will consider the services of another manufacturer, if that contractor states in writing:

- a. He will be able to utilize the existing TRANE Tracer Summit Direct Digital Control for HVAC and Energy Management.
- b. He will be able to provide a Direct Drive Fully Hermetic Compressor.
- c. The chiller can rotate at 3600 RPM's or lower.
- d. The chiller can utilize low-pressure refrigerant.

12. Requirements Certification: I certify that the requirement outlined in this justification is a Bona Fide Need of the Department of Veterans Affairs and that the supporting

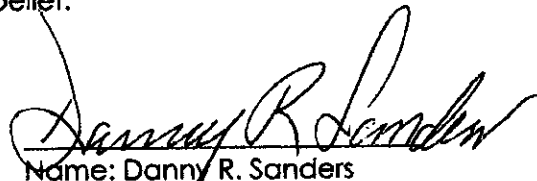
data under my cognizance, which are included in the justification, are accurate and complete to the best of my knowledge and belief.


Name: William Lightner
Title: Chief Facilities Services
Facility: NCO 4 VAMC Altoona, Pa.

1/19/12
Date

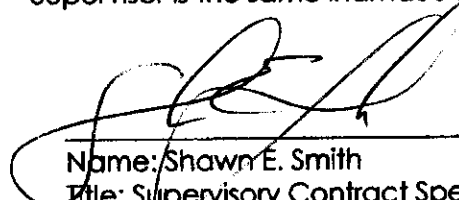
13. Approvals in accordance with FAR 6.304

- a. **Contracting Officer's Certification:** (required) I certify that the foregoing justification is accurate and complete to the best of my knowledge and belief.


Name: Danny R. Sanders
Title: Contracting Officer
Facility: NCO 4 VAMC Altoona, Pa.

1/19/2012
Date

- b. **One Level above Contracting Officer:** I certify that the foregoing justification is accurate and complete to the best of my knowledge and belief. *This signature may be the VISN NCM if the Contracting Officer and Contracting Supervisor is the same individual.


Name: Shawn E. Smith
Title: Supervisory Contract Specialist
Facility: NCO 4 VAMC Altoona, Pa.

23 JAN 12
Date

