

PERFORMANCE WORK STATEMENT (PWS)
Booster Pump Remote Indication and Alarm, Supplementary Installation Services
For Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNSY & IMF)

1.0 BACKGROUND

- 1.1.** S0570-AC-CCM-010/8010 ACN 3/A Paragraph 7.1.1.8 b adds requirements for booster pumps to have remote indications and alarms at a Ship's Force watch station. Parts and labor provided by vendor will replace the Variable Frequency Drive (VFD) system to support new remote indication and alarm capability for the booster pump to meet the requirement.

2.0 SCOPE/OBJECTIVE

- 2.1.** The contractor will procure a suitable replacement VFD and pressure sensor that fulfills PHNSY & IMF requirement for remote monitoring of booster pump indication and alarms at a continuously manned Ship's Force watch station. A Remote monitor will be procured by the contractor for eight (8) existing booster pumps. The contractor will support first time installation for two (2) systems. The contractor will modify mounting hardware to work with existing units, modify VFD functions, and perform a functional test of installed equipment. Contractor will demonstrate installation to support shipyard workforce installation of remaining 6 EA VFD units. Contractor will provide verbal and written instruction to support shipyard installation.

2.2. Equipment:

- 2.2.1.** The contractor will procure the following:
- 2.2.1.1.** Eight (8) VFD Systems:
 - 2.2.1.1.1.** VFD with an enclosure
 - 2.2.1.1.2.** Remote monitor
 - 2.2.1.1.3.** Minimum 150' weather rated cabling
 - 2.2.1.1.4.** Pressure Sensor
 - 2.2.1.2.** Two (2) Tester Boxes

3.0 PERFORMANCE REQUIREMENTS

- 3.1. VFD System:** The contractor will procure the following items:
- 3.1.1. Remote Monitor: The remote monitor shall have the following features:**
 - 3.1.1.1.** Replaceable LED indicators
 - 3.1.1.1.1.** LED to light up green for normal conditions.
 - 3.1.1.1.2.** LED to light up red for fault conditions.
 - 3.1.1.2.** Indication for a pump running light.
 - 3.1.1.3.** Alarm and indication for low pressure.
 - 3.1.1.4.** Alarm and indication for high pressure.
 - 3.1.1.5.** Alarm and indication for power trouble (e.g. loss of power, phase reversal, and loss of phase).
 - 3.1.1.6.** Alarm and indication for control switch being off or in manual.
 - 3.1.1.7.** Alarm and indication for trouble on controller or engine.
 - 3.1.1.8.** A button to silence alarms.
 - 3.1.1.9.** Housed in a water resistant enclosure.
 - 3.1.1.10.** Primary power to be supplied from VFD. Backup battery to power remote monitor to relay status in conditions when power is not present.
 - 3.1.2. VFD and enclosure:** The VFD shall automatically start, stop, and adjust the speed of the pump to maintain the discharge pressure set point within a nominal band as both the inlet

pressure and discharge flow rate vary. The VFD and enclosure shall have the following features:

- 3.1.2.1. VFD to be able to support BALDOR VECP84106T-4 20HP Motor
 - 3.1.2.2. NEMA 4X Enclosure able to fit into current booster pump.
 - 3.1.2.3. Enclosure shall be stainless steel, alloy 304 or higher grade Class 300 SS.
 - 3.1.2.4. User interface to adjust pressure points.
 - 3.1.2.5. Controller to prevent discharge pressure from exceeding 175 psig.
 - 3.1.2.6. Start/Stop control.
 - 3.1.2.7. External heat sink.
 - 3.1.2.8. Externally mounted operator keypad with water proof cover.
 - 3.1.2.9. Externally mounted run switch.
 - 3.1.2.10. Able to connect to existing disconnect switch.
 - 3.1.2.11. VFD to be Underwriters' Laboratories (UL) listed.
- 3.1.3. **Cabling:** Minimum 150' of weather rated cable. Cables to have easily detachable, water resistant connector on each end.
- 3.1.4. **Pressure sensor:** Able to connect and send signals needed to VFD to prevent discharge pressure from exceeding 175 psig.
- 3.2. **Tester Box:** The contractor will procure a tester box that will meet the following features.
 - 3.2.1. Housed in a water resistant enclosure.
 - 3.2.2. Able to connect to remote monitor via detachable cable provided for VFD System.
 - 3.2.3. Able to simulate VFD signals to remote monitor to test all indications and alarms.
- 3.3. **Installation of VFD System** within [REDACTED] In conjunction with the primary installation, the contractor shall perform the following:
 - 3.3.1. Install existing VFD Systems on 2 Booster Pumps.
 - 3.3.1.1. Allow shops to observe installation as a demonstration.
 - 3.3.1.2. Answer shops questions about installation process.
 - 3.3.2. Perform functional test of the VFD Systems to see it meets performance requirements of paragraph 3.1.
 - 3.3.2.1. Perform spray test on VFD enclosure to see if VFD enclosure meets NEMA 4X requirements.
 - 3.3.2.2. Allow shops to observe functional test as a demonstration.
 - 3.3.2.3. Answer shops questions about functional test process.
 - 3.3.3. Perform functional test of the Tester Box to see it meets performance requirements of paragraph 3.2.
 - 3.3.3.1. Allow shops to observe functional test as a demonstration.
 - 3.3.3.2. Answer shops questions about functional test process.
 - 3.3.4. Provide electrical and mechanical drawing set of documents/instructions for complete installation and maintenance.
- 3.4. **Contractor Qualifications:** Work shall be performed by qualified personnel.
- 3.5. **Technical Support and Warranty Period:**

There will be a 5 year warranty on workmanship and materials.
- 3.6. **Travel:** Contractor travel shall be in accordance with the DOD Joint Travel Regulation (JTR) and Federal Acquisition Regulations (FAR) 31.205-46.

4.0 QUALITY CONTROL

- 4.1. The Contractor is responsible for implementing and maintaining a Quality Control Plan (QCP) to ensure that performance meets or exceeds contract requirements and results in the correction of potential and actual problems. The QCP shall be implemented on the first day of contract performance. On request, the QCP shall be delivered to the Contracting Officer or designee within 5 business days.

5.0 GOVERNMENT FURNISHED SERVICES

- 5.1. Electricity, water, and related equipment will be available in order to perform troubleshooting/performance testing.

6.0 CONTRACTOR QUALIFICATIONS/REQUIREMENTS

6.1. Security Requirements:

- 6.1.1. In accordance with current DoD and Homeland Security requirements, performance of all work under this contract is restricted to U.S. citizens and U.S. nationals only.
- 6.1.2. The contractor shall pass a background check to gain access to PHNSY & IMF. The contractor's employees must be a U.S. Citizen and registered with the Defense Biometric Identification System (DBIDS). The contractor shall coordinate with the COR to obtain a gate pass at Building 3455 Pass Office. Only those individuals with favorable investigations shall be utilized on this contract. Contractor will coordinate with Building 3455 Pass Office in the completion of current form SECNAV 5512/1
- 6.1.3. Contractor personnel must meet the requirements for a "green" unescorted badge for access to areas requiring services related to this contract. Contractor will coordinate with PHNSY Security Office at building 207 in the completion of Visit Request for Pearl Harbor Naval Shipyard current form PH-SYD 5512/28
- 6.1.4. Contractor shall comply with Security requirements for PHNSY & IMF, Appendix III.

7.0 CONTRACTOR PERSONNEL

- 7.1. The Contractor shall furnish sufficient personnel to perform all work specified within this performance work statement. Contractor is required to comply with Public Law 105-270, Section 5(2) (A). This law states that contractors will not perform inherently governmental functions. Section 5(2)(A) of this Public Law defines the term "inherently governmental function" as "a function that is so intimately related to the public interest as to require performance by Federal Government employees." Per Section 5(2) (B), inherently governmental functions include management of Government programs requiring value judgments, conduct of foreign relations, selection of program priorities, and the direction of intelligence and counter-intelligence operations. Per Section 5(2) (C), inherent governmental functions DO NOT include, (i) gathering information for or providing advice, opinions, recommendations, or ideas to Federal Government officials; or (ii) any function that is primarily ministerial and internal in nature."
- 7.2. Contractor personnel shall not establish an employee-employer relationship with Government personnel under this contract.
- 7.3. Contractor shall not provide personal services.
- 7.4. Contractor personnel will make clear to all individuals they engage with that they are Contractor employees and not Government employees. When participating and introducing themselves during official events wherein Government, non-Government, or foreign personnel are present, Contractor personnel will identify themselves as employees of the Contractor. Contractor personnel must be clearly

identified (i.e. company shirt, pin, visible company ID, etc.) in a visible location as to who their employer is.

7.5. Contractor personnel shall not manage, supervise, or task Government employees or military personnel. Contractor personnel may not make any commitment to non-Government personnel, including a foreign official, which commits the expenditure of U.S. Government resources.

7.6. Normal government business hours of operation are 6:30 a.m. through 3:00 p.m. with a 30-minute lunch break, Monday through Friday, excluding Federal Holidays.

7.7. Federal Holidays:

All Federal Holidays Observed.

If the Federal Holiday falls on a Saturday, the holiday is observed on the preceding Friday.

If the Federal Holiday falls on a Sunday, the holiday is observed on the following Monday.

8.0 Safety and Environmental. The contractor and its subcontractors shall comply with Public Law 91-596 (Occupational Safety and Health Act (OSHA)) and the Environmental, Safety, and Occupational Health (ESOH) (DODD 4715.1E). These requirements shall be incorporated into the contractor's safety and health program. The Department of Defense (DOD) participates in the OSHA Voluntary Protection Program (VPP). Contractor personnel performing services on a DOD installation shall participate in the local VPP. Information on the VPP is available at <http://www.osha.gov/dcsp/vpp/index.html>.

8.1. Contractor shall comply with Safety and Health work practices for PHNSY & IMF, Appendix I.

8.2. Contractor shall comply with Environmental guidelines for PHNSY & IMF, Appendix II.

9.0 PERIOD OF PERFORMANCE:

9.1. Government and contractor will agree on a schedule work. Government will provide the contractor a ten (10) business day notification. All work shall be completed within three months after award. Technical Assistance shall be for 1 year.

10.0 PLACE OF PERFORMANCE

10.1. All work will take place at PHNSY & IMF

11.0 ATTACHMENTS:

11.1. APPENDIX I Safety and Health Work Practices for Contractors working with Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNSY&IMF). (Rev. July 8, 2021)

11.2. APPENDIX II Contractor Environmental Specification Guidelines (Rev. October 16, 2019)

11.3. APPENDIX III Contractor Security Requirements for PHNSY&IMF CIA, CNIA, NWA & Other Sensitive Areas (Rev. Jun 2021.)