DRAFT QUALIFICATION REQUIREMENTS FOR INCLUSION IN QUALIFICATION OF ORGANIZATIONS CONDUCTING CRITICAL MAINTENANCE, OVERHAUL, AND REPAIR OF LPD-17 CLASS MAIN PROPULSION DIESEL ENGINES (MPDES)

Ref: (a) NAVSEAINST 4734.1B, NAVSEA Test, Measurement and Diagnostic Equipment (TMDE) and Calibration Programs
(b) NAVSEA ST700-AM-GYD-010/METCAL, Metrology and Calibration Laboratory Requirements and Certification Guide
(c) NAVSEA S9233-DL-HBK-010, Main Propulsion Diesel Engine, Colt Pielstick Model PC 2.5 V STC, LPD 17 Class Ships: Standard Maintenance Procedures
(d) NAVSEA Instruction 5400.108 Policy for Quality Management on Work on Non-Nuclear Surface Ship Critical Systems

Qualification of the Commercial Diesel Engine Service Center (CDESC) will be accomplished in two parts. The CDESC will be initially evaluated to determine its ability to meet the qualification requirements. After the CDESC is awarded a contract, a post award readiness assessment will be performed by the Government to validate that the CDESC is qualified and ready to perform the particular maintenance, overhaul, or repair on LPD-17 MPDEs.

1. Qualification Requirements -

A. DOCUMENTATION – The CDESC must be able to show that it possesses all of the government issued documents required by this instruction.

B. CDESC DOCUMENTATION CONTROL PROCESS – The CDESC must demonstrate that it has an effective document control process in place.

C. CDESC TEST AND MEASURING EQUIPMENT CONTROL PROCESS IAW reference (a), the operation and maintenance of Navy systems requires quantitative and qualitative measurement of parameters including: voltage, current, resistance, frequency, pressure, temperature, flow, optic, torque, weight, mass, and vibration to monitor systems and equipment operation, perform scheduled

maintenance, or detect and isolate faults.

The accuracy of equipment used to conduct such measurements must be validated. The CDESC must demonstrate its control of test and measurement equipment and processes. The accuracy of individual measurement results must be traceable through an unbroken chain of calibrations to accepted references including, without limitation, U.S. National Standards, Natural Physical Constants, Ratio Type Calibrations, or Consensus Standards or National Standards of other countries which are correlated with U.S. National Standards as held or directed by the National Institute of Standards and Technology (NIST). .

The CDESC must demonstrate that all Test, Measurement, and Diagnostic Equipment (TMDE), that requires calibration is calibrated in accordance with the intervals and guidance contained in NAVSEA OD 45845, Metrology Requirements List (METRL).

The CDESC must demonstrate that its processes and procedures ensure that no TMDE that is not authorized by NAVSEA 04RM will be used for, or on, any NAVSEA systems or equipment.

For instrumentation that requires calibration, the CDESC must affix a calibration sticker to document the calibration status IAW reference (b). All TMDE shall be labeled to indicate current calibration status, including “inactive” and "no calibration required" (NCR), IAW reference (b).

D. CDESC STANDARD AND SPECIAL TOOLS, AND MATERIAL CONTROL – The CDESC must demonstrate that it has on hand the standard or special tools and equipment that are listed in Enclosure (4) of DRAFT Reference (c) or that it has a documented plan or process to obtain them. Following contract award, the Contractor will be held responsible and accountable for having all tools on hand at least 20 days before the start of the availability (A-20

E. CDESC REPAIR PART RECEIPT INSPECTION AND QUALITY CONTROLS – The CDESC shall demonstrate that it provides and maintains a successful quality control and inspection system for use while conducting LPD-17 Class MPDE I or D level maintenance, overhaul, and repair work. The contractor shall demonstrate

that it has part receipt inspections and quality controls in place to perform or have performed the inspection and tests required to substantiate product conformance to drawing, specifications, and contract requirements including, without limitation, all inspections and tests otherwise required by an awarded contract. The contractor's inspection system shall be documented and shall be available for review by the Government Pre-Qualification Inspection Team. Once qualification is attained, the CDESC shall notify the Government Pre-Qualification Team Leader in writing of any change to its inspection system. The inspection system shall be subject to disapproval if changes thereto would result in nonconforming product(s) or services.

F. CDESC MAINTENANCE, OVERHAUL, AND REPAIR PROCEDURE QUALITY MANAGEMENT SYSTEM –The CDESC shall provide the Pre-Qualification Team with a copy of its written policy and methods of implementing a MPDE maintenance, overhaul, or repair detailed statement of work. This document shall demonstrate the CDESC's documented maintenance, overhaul, and repair procedure quality management system.

IAW reference (d) Chapter VII, the CDESC shall demonstrate that it maintains and enforces organizational cleanliness standards at all times during the conduct of repairs.

G. CORRECTIVE ACTION PLANS AND PROCESSES – The CDESC shall provide its most recent Corrective Action Program policy which shall be in accordance with reference (d), Chapter VII. The policy shall include procedures for identifying, reporting, correcting, and following up on the correction of discrepancies. Additionally, the CDESC policy shall contain procedures to address the collection of discrepancy data as well as appropriate methods to prevent discrepancy recurrence. If applicable, the CDESC shall provide adequate documentation to support its response(s) to previously issued Corrective Action Reports (CAR) related to diesel engine repairs.

H. SAFETY MANAGEMENT –The CDESC shall demonstrate that it maintains an up to date safety program. The CDESC safety

procedures must include provisions for reporting safety hazards and the CDESC must demonstrate that all assigned personnel are familiar with them.

I. CDESC PERSONNEL QUALIFICATIONS –The CDESC shall provide a listing of current CDESC personnel that are qualified to conduct the tasks listed in Enclosure (3) of DRAFT reference (c)and provide their qualifications. In order for the CDESC to qualify as a supplier of maintenance, overhaul, or repair services for the LPD-17 MPDE, it must employ at least one MPDE Master Diesel Marine Mechanic and one MPDE Journeyman Diesel Marine Mechanic. Any CDESC seeking to be placed on the QBL Listing must also employ a qualified CDESC MPDE Program Manager and at least one CDESC MPDE Project Manager.

Personnel shall meet the following minimum level of qualification:

(1) *CDESC MPDE Program Manager* – Shall be responsible for overall management and oversight of LPD 17 MPDE repairs, schedules, pricing, and technical performance matters with the full authority to speak on behalf of the respective CDESC. This individual should have a minimum of 3 years' experience as a MPDE Program Manager as well as at least 3 years of MPDE Project Management experience. He must be Project Management Professional (PMP), certified and possess an MS Degree in a relevant field (e.g. Marine Engineering, related Science, Business, or Math).

(2) *CDESC MPDE Project Manager* (Ship Specific) – The PC2.5V STC intermediate or depot Project Manager manages LPD–17 MPDE maintenance actions including equipment repairs, parts replacement, and upgrades. He also tracks the installation of push systems and other major engine structural modifications. The Project Manager will provide daily updates to chain-of-command on the status of repairs. He shall have a minimum of 3 years of MPDE Project Management experience, be PMP Certified, and possess a BS degree in a relevant field. This experience includes tracking and monitoring the MPDE availability major milestone completion and maintaining and updating the repair schedule.

(3) *Marine Diesel Mechanic* Levels of Professional Development (minimum requirements):

a) *Apprentice Diesel Marine Mechanic* for PC2.5V STC – FME Factory Maintenance Training for PC 2.5V STC Diesel Engines or a minimum of 2 years of experience in repair of similar engines under the guidance of a Master Mechanic.

NOTE: NAVSSES PC2.5 Hot Plant and Navy C-School training may be substituted for FME Factory Maintenance Training.

b) *Journeyman Diesel Marine Mechanic* for PC 2.5V STC –FME Factory Maintenance Training + a minimum of 2 Years Apprentice Experience under the supervision of a Master Diesel Marine PC 2.5V Mechanic. 4 years of experience in repair of similar engine lines under the guidance of a Master Mechanic may be substituted for specific PC2.5V STC engine experience. An additional 2 years of maintenance, overhaul, or repair experience with similar engines may be substituted for FME Factory Maintenance Training.

NOTE: NAVSSES PC2.5 Hot Plant and Navy C-School training may be substituted for FME Factory Maintenance Training.

c) *Master Diesel Marine Mechanic* for PC 2.5VSTC FME Factory Maintenance Training +4 Years Journeyman Experience under supervision of Master Diesel Marine PC2.5V Mechanic. 8 years of experience in repair of similar engines lines may be substituted for specific PC2.5V STC engine experience. An additional 4 years of experience in the repair of similar engines may be substituted for FME Factory Maintenance Training.

NOTE: NAVSSES PC2.5 Hot Plant and Navy C-School training may be substituted for FME Factory Maintenance Training.

In addition to the above requirements, the Government Pre-Qualification Team will administer an examination to each mechanic who is proposed by the CDESC to work on LPD-17 MPDEs, to test their level of knowledge. A minimum score of 80% must be achieved for an individual mechanic to be considered qualified at the appropriate level. Separate exams will be given

for Apprentice, Journeyman, and Master level personnel. Any additional proposed mechanics that are not tested during this qualification phase MUST be tested during the Prior-to-start phase. A listing of topics assessed by each examination (at all levels), and contact information is contained in Enclosure (7) of DRAFT reference (c).

(4) Actions for Failed Mechanics Test:

a) Mechanics who fail to successfully pass the written examination with a score of 80% or better may be retested after the successful completion of an approved refresher training course.

b) A mechanic who fails the examination for a second time shall not conduct surface ship critical maintenance, overhaul, or repair of LPD-17 Class MPDEs.

c) CDESCs with inadequate numbers of personnel who have successfully passed the requisite exams will be determined not qualified to be on the QBL listing to conduct surface ship critical maintenance, overhaul, or repair of LPD-17 Class MPDEs.

J. CDESC'S FINAL ACCEPTANCE INSPECTION PROCESS- The CDESC shall demonstrate that it has an adequate process in place for Final Acceptance Inspection. This process shall ensure that all contracted work has been successfully completed to an acceptable level of quality IAW the Statement of Work.

2. Post Award Readiness Assessment (Ready to Start Audit)

A. PRIMARY/SECONDARY DESIGNATION - It is the intention of the Government to make award for maintenance, overhaul, or repair of LPD-17 MPDEs to one primary and one secondary contractor.

Each contract, at the time of contract award and at time of option exercise (if any), will be designated as either "primary" or "secondary". The initial designation at time of contract award or definitization of work scope will be based on

a “best value” source selection evaluation, and subsequent designations will be at the sole discretion of the Contracting Officer after consultation with the Diesel TWH, based primarily, but not necessarily entirely, on his subjective judgment of the primary contractor’s performance (for example, it may also be based on the contractor’s workload capacity or capability). Thus, at time of award, or definitization of work scope, the Contractor offering the best overall value will be designated the “primary” Contractor. The Contractor offering the second best overall value will be designated the “secondary” Contractor. The Contract with the “primary” Contractor will be for the maintenance, overhaul, or repair of LPD-17 MPDEs. The Contract with the “secondary” Contractor will include legally sufficient consideration and will provide that the “secondary” will be available to perform maintenance, overhaul, or repair of LPD-17 MPDEs as the “primary” Contractor in the event the initial “primary” Contractor is re-designated by the Contracting Officer as the “secondary” Contractor.

The Government may reverse the designations of “primary” contractor and a “secondary” contractor. Normally, an initially selected “primary” contractor will continue through the basic and option years as the prime contractor, and the initial “secondary” contractor will continue as the “secondary” contractor barring poor performance or other circumstances as determined by the contracting officer in his judgment warrants replacing the “primary” contractor with the “secondary”. The “secondary” contractor will not perform the primary work unless and until the designations of a “primary” contractor and a “secondary” contractor are reversed. This may occur, for example, if the “primary” contractor fails to pass the Ready-To-Start Audit and fails to correct any deficiencies within the time allotted in the Government’s notification of the primary contractor’s failure to pass the Ready-To-Start Audit or by 20 days before the start of the availability (A-20), whichever is later. In that event, the original “secondary” contractor (now the “primary” contractor) will be authorized to perform the work on the LPD-17 MPDEs.

The contract with the “primary” contractor will provide that in the event the Contractor is re-designated as the “secondary” Contractor, it will be available to perform maintenance, overhaul, or repair of LPD-17 MPDEs as the “primary” Contractor in the event the new “primary” Contractor (formerly the “secondary” contractor), is once again re-designated as the “secondary” Contractor.

B. AUDIT - The purpose of the Ready-To-Start Audit is to validate that the CDESC is qualified to perform the specific statement of work in the awarded contract or in the definitized work scope. The Government will conduct the Ready-To-Start Audit of the “primary” Contractor within two weeks after contract award or definitization of the work scope. The Government will conduct the Ready-To-Start Audit of the “secondary” Contractor as soon as practical following completion of the Ready-To-Start Audit of the “primary” Contractor.

(If all aspects of Post Award Readiness Assessment were completed successfully, and there have been no changes to CDESC capabilities or personnel, the Ready-to-Start Audit is expected to be a brief perfunctory process.)

1) For MSMO contracts, no later than 135 days before the start of the availability (A-135), the MSMO contractor shall identify whether it will perform the MPDE maintenance, overhaul, or repair. If not, it will identify the qualified “primary” CDESC on the QBL that will perform maintenance, overhaul, or repair of LPD-17 MPDEs, and the qualified “secondary” CDESC on the QBL that it will contract with to serve as the back-up CDESC.

NOTE: Under a MSMO Contract, the PRIMARY CDESC may be the MSMO Contractor itself and the SECONDARY CDESC a Qualified Sub-Contractor on the QBL.

2) In either case, MSMO or NON-MSMO there must be both a primary and secondary CDESC ready to perform no later than 20 days before the start of the availability (A-20).