



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

August 14, 2007
Subject: **LOA Passenger/Car Ferry Vessel**
Project No: FBD-1168(100)X
Pin: 11681.00
Amendment No. 3

Dear Sir/Ms:

The following questions have been received.

Question: Spec section 1.9 states: "Buy America Policy for entire ferry" however the six below deck sliding watertight doors, which do not show up in the specifications but the plans, Dwg# 575-02-635, Sht. 5of 5, are manufactured in Norway. Is this acceptable? There are no specifications on the hydraulically operated sliding, USCG Type III, doors? If there are please advise.

Response: The drawing states the requirements for the doors, but not the manufacturer. When a product required on the ship is not available from an American manufacturer then it can be purchased overseas as long as it's cost is less than 60% of the total cost of the ship. In any case, the doors must meet the USCG specification for type II doors no matter where they are purchased.

Question: Spec section 15.3 calls for 3508B main engines producing 855 BHP at 1600 RPM. Caterpillar can only offer a 3508C engine rated at 1000 BHP at 1600 RPM. Will this be acceptable? The 4.5" diameter shafts, cooling circuits and specified 10" exhaust may have to increase in size to absorb the additional in horse power. Can Seaworthy Systems do calculations and drawing changes, if any, to update plans?

Response: As indicated in Section 15.3 of the Specifications, a Bidder can propose an equivalent engine. The proposed engine must be listed in the List of Major Equipment that the Bidder will submit. The engine proposed by a Bidder will be examined and if an equivalent engine is proposed, the required adjustments to the design will be evaluated. The MaineDOT/Maine State Ferry Service through its Naval Architect, can certainly



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recheck the shaft sizes, cooler sizes, and exhaust sizes, mounting structure, etc. for a proposed higher rated engine. If required, after the award of the contract, a matrix of affected systems and required calculations for the greater engine horsepower output will be developed. A de-rating of a proposed engine down to the 3508B output of 855 bhp is acceptable.

Question: Spec section 36.3 specifies a Cat Model C-9 bow thruster engine. The C-9 engine currently produces 503 BHP at 2500 RPM. Caterpillar will offer the C-12 DITA model which produces 385 BHP at 1800 RPM. Is this acceptable?

Response: The bow thruster engine was chosen by Thrustmaster of Texas to match the required HPU and bow thruster required thrust. It comes supplied on an integrated skid with the HPU and Hydraulic Reservoir. If at this time a C-12 is the only option for EPA requirements, then Thrustmaster should be able to supply a C-12 unit or similar horsepower unit from a different engine manufacturer. If an equivalent engine is proposed, the drawings affected by the change will be modified by the MaineDOT/Maine State Ferry Service, through its Naval Architect.

Question: Spec section 38.1 specifies both ship service generators to be, model #M1064A and emergency generator to be 1064T1. These are yacht type engines and are not available as keel cooled models. Please change to M99C2 for ship service generators and M65C2 emergency generator. Also you do not want both ship service generators to be air start as specified; at least one electric start generator needs to be on hand.

Response: Plans call for M1066T engine which is available keel cooled. However, the M99C2 is suitable and, as a matter of fact, the same engine as the M1066T. The same is true for the M1064T1. The key for the EDG installation is to find a radiator cooled unit. Northern Lights indicated that they could supply such a unit with double wall HP fuel pipes.

There is no regulation that requires alternate means of starting for both SSDG's. MaineDOT's Naval Architect believes air starts to be suitable.


Question: Spec section 16.1 states that the builder is responsible to insure that the exhaust back pressures are less than half the allowable by the engine manufacturers, yet the exhaust plan, Dwg# 575-02-259 depicts the piping sizes and hospital grade mufflers. If this stands the exhaust piping size and mufflers may have to increase, reducing the amount of room in the stack and increasing the cost. Can Seaworthy Systems do a final back pressure calculation with the latest engine model and muffler models?

Response: If the Bidder proposes an engine other than that specified in Section 15.3 of the specification, such as a Caterpillar Engine model 3508C, the MaineDOT/Maine State Ferry Service through its Naval Architect, can check the exhaust pipe size and back pressure and see how much any size changes will impact the design. If required, after the

award of the contract, a matrix of affected systems and required calculations for the greater engine horsepower output will be developed. As indicated in Question 2 above, the engine must be listed in the List of Major Equipment that the Bidder will provide.

Consider this information prior to submitting your bid on September 28, 2007.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Bickford", written over a horizontal line.

Scott Bickford

Contracts & Specifications Engineer