

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 5a

Date of Meeting December 6, 2011

DATE: November 22, 2011

TO: Tay Yoshitani, Chief Executive Officer

FROM: John Christianson, General Manager Aviation Maintenance

SUBJECT: Airport Building Management System Service Support

Amount of This Request: \$0

Source of Funds: Airport Development Fund

Est. State and Local Taxes: \$156,000 over 5 year contract

Total Contract Value: \$1,793,100 over 5 years

ACTION REQUESTED:

Authorization for the Chief Executive Officer to execute appropriate contract documents, including amendments, to continue to receive software and hardware maintenance services for the Airport's Direct Digital Control (DDC) System. Authorization is being requested to execute contract documents for service through December 2016. This system is utilized to operate and maintain many of the mechanical systems throughout the Airport. The cost of this annual service is \$359,000 including tax for up to five (5) years for total payments estimated at \$1,793,100.

SYNOPSIS:

The annual cost of this contract for 2012 has been included in the 2012 operating budget, which was earlier submitted to the Commission. However, Port Resolution No. 3605, as amended, mandates that the Chief Executive Officer receive Commission authorization to execute contracts greater than \$300,000.

The DDC system at the Airport assists in the operation and maintenance of the Heating, Ventilation and Air Conditioning (HVAC) systems, domestic water systems, sanitary sewer systems, smoke control systems, gas heating and cooking systems, compressed air systems, storm water pumping and environmental control systems. The existing system contains over 75,000 control points and 15,000 devices controlled by 145 Master Building Controllers (MBC). The system is integrated into the infrastructure of the facility.

A service contract to support this large system has been in place in some form since the initial installation of a DDC system in the 1980's. Siemens is the current and proprietary provider for the maintenance service contract on this system. We are requesting authorization to execute a

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new five year contract with Siemens Building Technologies to replace the existing contract that expires in December 2011.

On November 3, 2011, the Port approved a competition waiver, number 2011-26 and notified the Commission of this waiver for this contract with Siemens as the proprietary provider.

The cost of the work is reviewed and estimated independently for each scope element by Port of Seattle Maintenance personnel, and Facilities and Infrastructure personnel. The scope of Siemens work includes providing software updates, network analysis, network optimization, software analysis, software optimization, automation controls analysis optimization, control loop analysis, control loop optimization, and data back-ups. The proposal has been reviewed for cost and scope and has been deemed comparable to other similar facilities.

BACKGROUND:

The Siemens Direct Digital Controls (DDC) system was originally procured through a competitive bidding process dating back to the 1980's. At that time, Siemens was the low bidder on the original Concourse A expansion. Siemens was also the low bidder on the 1991 Concourse B, C, and D Upgrade project. Both of these projects were "open" bids with no competition waiver requirements.

In 2008, Siemens was the low bidder on the Rental Car Facility (RCF) Project, designed as a stand-alone DDC system that was "open" bid with no competition waiver requirements. The RCF system has yet to be completed as construction is still underway. Between and after these major projects, the DDC system has been expanded in a "Sole Source" capacity.

This execution of a new five (5) year contract incorporates an option to cancel the contract at the completion of any year of the contract with 60 days written notice. Since the DDC system incorporates proprietary equipment, and requires proprietary tools and training for technicians to perform this specific maintenance on the system, there are no other vendors that can provide the support needed to maintain this system. Only services that are proprietary in nature are included in this agreement. All other non-proprietary maintenance services have been assigned to Port of Seattle Operating Engineers for execution.

PROJECT JUSTIFICATION:

Project Objectives:

The objective of this request is to allow the Aviation Maintenance Department to continue to maintain the Siemens DDC system in an effective manner, ensuring the Airport continues to operate effectively.

PROJECT SCOPE OF WORK:

- **Software Analysis & Optimization.** Through Software Analysis & Optimization, this service will help ensure that the HVAC control system is operating properly to minimize any software problems that would negatively impact system performance.

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- **Network Analysis & Optimization.** Through Network Analysis & Optimization, this service will ensure reliable and optimized communication throughout the Airport's HVAC Control System's Building Level Network of field panels.
- **Automation Controls Analysis & Optimization.** Automation controls can drift out of calibration with changes in mechanical component performance characteristics, building use, and climatic conditions. This service will extend equipment life, reduce energy consumption, and reduce the risk of costly and disruptive breakdowns.
- **Controller Analysis & Optimization (Field Level Network).** Through Controller Analysis & Optimization, this service will ensure reliable and optimized performance of the Airport's Terminal Equipment Controllers throughout the HVAC systems.
- **Software Updates.** Through this service, the Port will benefit from new features and enhancements that will improve building operations, take advantage of the latest version changes, while extending the life of the Airport's earlier software (named APOGEE) investment. This service will provide the Port with software and documentation updates to our existing APOGEE software as they become available (approximately annually).
- **Business Protection & Recovery Services.** Through this service the Port will receive protection for our HVAC control system's vital databases of business information from unforeseen and costly catastrophic events (lightning strike, electrical power surge, hard drive or controller failure, flood, physical damage, etc.). This service will provide quarterly database back-ups.
- **Online Systems Support.** This service will provide unlimited system and software troubleshooting and diagnostics via modem and direct phone support. This service is available through vendor in-house specialists during normal business hours.

FINANCIAL IMPLICATIONS:

Budget Status and Source of Funds:

Contract payments are included as a specific line item in the Aviation Maintenance Expense budget. The funding source is the Airport Development Fund. Funding for future years will be included in future Aviation Maintenance annual expense budgets as a specific line item.

ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

Alternative 1: Do Nothing. Do not execute a contract with Siemens. Because the system is proprietary, we will be unable to maintain the system. Equipment failures will eventually occur. This is not the recommended alternative.

Alternative 2: Attempt to execute the contract with another vendor. Because of the proprietary nature of the software and hardware on the system, and the requirement for technicians to be factory trained, this is not the recommended alternative.

Alternative 3: Execute a five (5) year contract with Siemens Building Technologies for the services noted above. **This is the recommended alternative.**

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OTHER DOCUMENTS ASSOCIATED WITH THIS REQUEST:

N/A

PREVIOUS COMMISSION ACTION:

There have been no previous Commission actions related to this maintenance contract other than the Commission's recent review of the 2012 operating budget. First Reading of the 2012 budget occurred on November 8, 2011.