



- Board of Directors
Engineering and Operations Committee

5/8/2012 Board Meeting

8-7

Subject

Authorize agreement with Johnson Controls, Inc. in an amount not to exceed \$3.75 million to maintain and repair physical security systems

Description

This action awards an agreement for security system maintenance and integration services for a one-year period beginning July 1, 2012, with options to renew for four additional years.

Timing and Urgency

Metropolitan safeguards its infrastructure through a combination of physical barriers, contracted security guard services, electronic access control and intrusion monitoring systems, operational patrols, water quality monitoring, and employee awareness. Through this multi-layered approach, Metropolitan protects critical infrastructure which supplies drinking water to the region.

The electronic security system was designed, installed, and maintained by a specialized firm which was competitively selected in 2003. This firm, Johnson Controls, Inc., provides routine preventive and corrective maintenance and serves as a system integrator to incorporate new facilities and ensure that the electronic security system remains operational system-wide. The existing agreement will expire on June 30, 2012, and staff recommends that a new agreement be authorized with Johnson Controls so that security system maintenance may continue without interruption. Funds for this work have been included within Water System Operations' O&M budget for fiscal years 2012/13 and 2013/14.

Background

Metropolitan provides physical security control measures to defend its facilities from intrusion. Following the events of September 11, 2001, Metropolitan modified its security protocols and initiated an enterprise-wide security program which enhanced security at 74 locations throughout the service area based on a comprehensive vulnerability assessment.

At the present time, Metropolitan's security system includes over 750 card readers, 500 cameras, and 1,000 alarm points as well as two 24/7 control rooms and numerous field locations for remote monitoring through a complex customized system. This system was designed and installed by Johnson Controls to meet Metropolitan's specific operational and security requirements. Johnson Controls was selected in 2003 through a two-step competitive process involving review of statements of qualifications and proposals from experienced and qualified firms. Eighteen firms submitted qualifications and proposals, and four firms were deemed qualified to provide the required services. Johnson Controls was subsequently selected as the most qualified firm. The resulting agreement included design and installation of security systems including alarm, video, and access control at 74 prioritized locations. In addition, a maintenance agreement was executed to cover four years of preventive and corrective maintenance services beyond the original one-year warranty period.

In July 2007, Metropolitan's Board authorized an extension of the security system maintenance agreement for a new total amount not to exceed \$2.7 million over an additional five-year period. The existing agreement will

expire on June 30, 2012. The scope of the existing agreement provided for preventive and corrective maintenance (including labor, materials and supplies) of the entire security system. Importantly, the agreement includes provisions for a 24/7 response to troubleshoot or repair the equipment at all Metropolitan facilities. In addition, the agreement requires Johnson Controls to integrate and maintain all new equipment. Metropolitan and Johnson Controls annually negotiate a maintenance fee.

In 2008, a security firm conducted an independent external assessment of Metropolitan's security program. The assessment found that Metropolitan operated highly effective security systems and that the system maintenance was also rigorously managed to ensure functional and reliable infrastructure protection. The report ranked Metropolitan's security program as "Best-in-Class."

Planned Approach for Security System Maintenance

Metropolitan's security system operates 24/7 and requires continuous maintenance and monitoring by the vendor to ensure proper system functionality. Because of the complex features employed in this system, and without the vendor's continuous support and upkeep, this system will deteriorate and lose functionality. This would reduce Metropolitan's ability to secure its employees and critical infrastructure.

Design, procurement, installation, and commissioning of enterprise-wide security systems are time and capital intensive. As a result, major upgrades or replacements are performed infrequently. The service life of electronic security systems mirrors that of Supervisory Control and Data Acquisition Systems and ranges from 8-15 years. At the present time, the originally installed components of Metropolitan's security system infrastructure are now approximately 9 years old. With continued maintenance, the security system's useful life can be extended to 15 years. As such, staff does not recommend a major upgrade or replacement at this time. Rather, staff recommends that the existing system be maintained for the next 5 years. During this period, staff will begin planning for a major upgrade or replacement.

Staff also considered hiring a third party to maintain the security system until a replacement is required. Maintenance of the current security system with its degree of complexity and wide geographic footprint requires involvement of numerous personnel with varied and specific qualifications related to the latest security technology. Further, though equipment such as key-card readers and cameras can be maintained by a number of firms, the software which integrates the system was licensed by Johnson Controls. If a separate company were selected to maintain the security system, a new license agreement would need to be negotiated or new software would need to be developed.

Based on industry practice, the average cost of security maintenance service runs between 5 to 10 percent of the total installed cost. Metropolitan's current maintenance expenditures represent an annual average of 3.5 percent of the total system installation cost, which is below the industry norm. The maintenance services provided by Johnson Controls have been timely and the overall level of service has been excellent. Johnson Controls has successfully maintained the system—at a lower cost than industry norms—to ensure an uptime of greater than 99.9 percent for all high- and medium-critical facilities. Further, Johnson Controls provides a truck-based service team which can respond to any high-critical facility within 4 hours. Due to its familiarity with the system, staff believes that Johnson Controls is the best-qualified vendor to provide these maintenance services over the next five years.

Agreement for Security System Maintenance

The scope of the security system maintenance agreement will include maintenance and repair of the system to ensure a high degree of reliability and availability. Johnson Controls will be required to maintain computer hardware and software, servers, and physical security devices. Johnson Controls will also be required to procure and pre-position critical components at Metropolitan's facilities and to provide a 24/7 response. Finally, Johnson Controls will be required to integrate any new facilities or equipment into the existing system.

Based on historical expenditures on the system maintenance, and allowing for modest increased maintenance due to system expansion as well as giving consideration to aging equipment, it is estimated that \$3.75 million will be required to upkeep the system for the next five years.

Therefore, it is recommended that a new five-year agreement be awarded to Johnson Controls for a total amount not to exceed \$3.75 million. The new agreement will permit Metropolitan to terminate on July 1, 2013, and on July 1 of each subsequent year of the agreement term. At each renewal period, Metropolitan staff will negotiate rates for the following year to ensure the most cost-effective maintenance program is selected.

Policy

Metropolitan Water District Administrative Code Section 8121 (a): Contracts over \$250,000

Metropolitan Water District Administrative Code Section 8140 (e): Competitive Procurement

Metropolitan Water District Administrative Code Section 9100 (b): Risk Management

California Environmental Quality Act (CEQA)

CEQA determination for Options #1 and #2:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves the design, installation, and maintenance of security systems at existing public facilities involving negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies under a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines). In addition, the funding element through the authorization of agreements with Johnson Controls is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project that may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under a Categorical Exemption (Class 1, Section 15301 of the State CEQA Guidelines). In addition, the funding mechanism is not subject to CEQA (Section 15378(b)(4) of the State CEQA Guidelines).

CEQA determination for Option #3:

None required

Board Options

Option #1

Adopt the CEQA determination and authorize a new five-year maintenance agreement with Johnson Controls, Inc. for a total amount not-to-exceed \$3.75 million for routine maintenance of physical security systems at all Metropolitan facilities, with an option for Metropolitan to terminate the agreement on an annual basis.

Fiscal Impact: \$3.75 million of budgeted O&M funds over five fiscal years starting on July 1, 2012 and ending on June 30, 2017

Business Analysis: This option will ensure that Metropolitan's physical security system continues to function properly on a 24/7 basis.

Option #2

Adopt the CEQA determination and authorize a one-year maintenance agreement with Johnson Controls, Inc. for an amount not-to-exceed \$750,000 for routine maintenance of physical security systems at all Metropolitan facilities.

Fiscal Impact: \$750,000 of budgeted O&M funds over one fiscal year starting on July 1, 2012 and ending on June 30, 2013. In future years, additional funds would be needed to maintain the system.

Business Analysis: This option will ensure that Metropolitan's physical security system continues to function properly on a 24/7 basis for one year. During this year, Metropolitan would advertise and competitively bid a new agreement to maintain the security system. Because of the complex system and proprietary nature of the software, a rigorous and careful transition to a new vendor would be managed during the one-year agreement period.

Option #3

Do not authorize the agreement with Johnson Controls at this time. Instead, contact the vendor each time the system fails to function and/or requires maintenance on an individual basis. Additionally, Metropolitan would advertise and competitively bid a new agreement to maintain the security system in future years.

Fiscal Impact: Unknown, but anticipated to be greater than Options #1 and #2 due to the complexity of the system and the number of components involved.

Business Analysis: Under this option, pricing and the terms of the individual maintenance service agreements may be less favorable. In addition, this option would require more staff time and potentially leave Metropolitan vulnerable as the security system loses its 24/7 functionality while awaiting proper repair.

Staff Recommendation

Option #1


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4/24/2012
Date


Jeffrey Lightlinger
General Manager

4/26/2012
Date

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