
CITY OF SAN ANTONIO

OFFICE OF THE CITY AUDITOR



Audit of the Convention and Sports Facilities Contract for
Elevator and Escalator Preventative Maintenance Services

Project No. AU15-006

July 13, 2015

Kevin W. Barthold, CPA, CIA, CISA
City Auditor

Executive Summary

As part of our annual Audit Plan approved by City Council, we conducted an audit of the contract between the City's Convention and Sports Facilities and Kone, Inc. to provide elevator and escalator preventative maintenance services. The audit objective and conclusion follow:

Are the City of San Antonio and Kone, Inc. in compliance with key terms of the contract and is the City's monitoring of the contract effective?

No, the Convention and Sports Facilities (CSF) Department does not have effective monitoring controls in place to ensure compliance with key contractual terms outlined in the Contract for Elevator and Escalator Preventative Maintenance Services.

Control deficiencies were identified in the following areas:

- A contract administration plan was not established to ensure that the key provisions of the contract are being reviewed and followed-up on as necessary.
- Required insurance endorsements that serve as evidence of insurance coverage were not obtained by the contractor.
- Support to ensure that the mechanics are adequately qualified as prescribed by the contract was not provided.
- Required preventative maintenance and inspections are not always performed. Effective monitoring of assigned maintenance and inspections is not taking place by contract monitors.
- The contractor is not responding timely to service calls for elevator/escalator issues. Additionally, out of service credits for untimely responses are not being requested by the contract monitors.

Convention and Sports Facilities Management's verbatim response is in Appendix B on page 9.

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Background

The City's Convention and Sports Facilities (CSF) Department entered into a full service agreement with Kone, Inc. to provide elevator, escalator, and wheel chair lift preventative maintenance services at the convention and sports facilities. In total, Kone, Inc. provides preventative maintenance and inspection services for 33 elevators, 21 escalators, and one wheel chair lift for the following locations: Alamodome, Henry B. Gonzales Convention Center (HBGCC), Lila Cockrell Theatre, and three buildings in Hemisfair Park (University of Mexico, Institute of Mexican Cultures, and Building 277).

The initial term of the agreement commenced on November 15, 2012 and will expire on September 30, 2015. The City has the option to renew the agreement for two additional one year terms.

The scope of work to be performed by Kone, Inc. for preventative maintenance services includes: furnishing replacement of worn parts, materials, labor, tools, and supplies necessary to provide full-service equipment maintenance (including parts with some exceptions); inspections, adjustments, and testing for all elevators, escalators, and a wheel chair lift.

A standard monthly fee ranging from \$99 to \$812 is paid each month for preventative maintenance services performed. Additionally, the contractor may bill the City for other services as needed. These services include: event standby services, non-covered replacement parts, and overtime calls. The following table provides the amounts paid to Kone, Inc. for FY2013 and FY2014, respectively.

Total Amount Paid for Preventative Maintenance and Other Services				
	FY2013		FY2014	
	Monthly Preventative Maintenance	Other Services	Monthly Preventative Maintenance	Other Services
HBGCC¹	\$ 224,150	\$ 23,018	\$ 246,702	\$ 675
Alamodome	\$ 50,890	\$ 21,062	\$ 40,712	\$ 39,048
Total Per FY	\$319,120		\$327,137	

Source: City's Financial Accounting System (SAP)

¹ The HBGCC payment totals include fees for services performed at the Convention Center, Lila Cockrell Theater and the Hemisfair Park locations.

Audit Scope and Methodology

The audit scope included contract terms and monitoring efforts from October 2013 to September 2014.

Our methodology and testing criteria consisted of conducting interviews and walkthroughs with key personnel at the Alamodome and HBGCC.

In addition, we reviewed the key contract terms outlined in the contract, which included: contractor and personnel qualifications, preventative maintenance program, replacement and spare parts, normal and emergency service calls, equipment inspections, billing requirements, insurance, bonds, prevailing wages, and record retention requirements.

Elevator and escalator preventative maintenance checklists/schedules were compared to unit history reports and service tickets to determine if the contractor performed the required preventative maintenance per equipment item. We selected 6 months of required maintenance to review for the 33 elevators, 21 escalators, and the one wheel chair lift. The months selected were based on those with the highest volume of required preventative maintenance.

We relied on computer-processed data in SAP and the Kone eOptimum System to validate payments made to the contractor and to retrieve historical elevator and escalator equipment reports. Our reliance was based on performing direct tests on the data rather than evaluating the system's general and application controls. We do not believe that the absence of testing general and application controls had an effect on the results of our audit.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Audit Results and Recommendations

The Convention and Sports Facilities (CSF) Department does not have effective monitoring controls in place to ensure compliance with key contractual terms outlined in the Contract for Elevator and Escalator Preventative Maintenance Services.

Control deficiencies were identified in the following areas:

A. Non-existence of a Contract Administration Plan

CSF personnel have not developed a Contract Administration Plan (CAP). Additionally, reviews are not taking place to ensure compliance with administrative terms of the contract.

Per the City Procurement Policy and Procedures Manual, the contracting officer of the managing department should develop a CAP. This is a working document that serves as a tool for administration and monitoring purposes. It should highlight the key provisions of the contract, the monitoring tasks to perform, and the frequency of actions to be taken.

Without an established CAP, early detection of issues and non-compliance with contract terms may not be identified in a timely manner.

Recommendation

The CSF Director should develop a CAP for all contracts and conduct administrative reviews to ensure that essential tasks are performed and monitoring functions are completed, and that essential support documentation is maintained.

B. Lack of Support for Insurance Coverage

Required insurance endorsements were not on file as illustrated in the following table. Consequently, we could not determine if the City is appropriately insured.

Required Insurance Coverage (as stated in the contract)			
Coverage Types:	Required Endorsements:	KONE (Contractor)	Central Texas Elevators (Subcontractor)
		Was the Endorsement Provided?	
Commercial General Liability	Other Insurance	Yes	No
	Subrogation	Yes	No
Business Automobile Liability	Other Insurance	No	No*
	Subrogation	Yes	No*
Worker's Compensation	Other Insurance	No	No*
	Subrogation	Yes	No*

* Contract terms require the subcontractor to obtain the same insurance coverages as the contractor. Per review of the subcontractor's certificate of insurance, no coverage has been obtained for automobile and worker's comp insurance.

Lack of adequate insurance by the contractor and subcontractor increases the City's exposure to a financial liability in the event of personal injury due to malfunctioning equipment.

Recommendation

The CSF Director should ensure that all insurance documents meet the requirements outlined in the contract by conducting initial reviews at the time the contract is established, as well as periodic reviews as needed when contracts are renewed and/or new terms are established. If it is deemed that insurance coverage is not required, support of an approved waiver should be kept on file.

C. Verification of Personnel's Qualifications are Not Performed by CSF

We were unable to validate that the mechanics met the required qualifications. Support to provide evidence that the 7 mechanics listed on the history reports reviewed is not maintained by CSF. Consequently, we requested documented support from the vendor that would validate that mechanics were qualified and trained appropriately, but did not receive it.

Per contract terms, elevator mechanics are required to be registered with the Texas Department of Licensing and Regulation (TDLR), have manufacturing training, a minimum of five years of experience providing maintenance on commercial elevators within the last seven years, and be a permanent employee of the contractor.

Non-qualified mechanics increase the risks that preventative maintenance and inspections are not adequately performed and consequently, poses a safety risk to the public.

Recommendation

The CSF Director should implement monitoring controls to periodically review the contractor's personnel qualifications; documentation and support should be kept on file.

D. Monitoring Controls regarding Preventative Maintenance, Inspections, and Service Calls are Not Effective

Preventative Maintenance

The contractor is not complying with preventative maintenance requirements outlined in the contract and CSF personnel are not monitoring the preventative maintenance contractual terms.

Per contract terms, a preventative maintenance checklist/schedule shall be permanently maintained in each machine room. The following information shall be included on the checklist/schedule: name of building, elevator/escalator type,

elevator/escalator number, elevator/escalator serial number, items of maintenance and frequency, date performed, initials of mechanic, and certification by contractor that maintenance has been performed.

Preventative maintenance schedules provide a checklist of the required maintenance services that shall be performed by the contractor. During the audit, we requested all 55 preventative maintenance schedules from 2014. Based on our review, we noted the following:

- CSF personnel were unable to provide 3 of the 55 preventative maintenance schedules. In addition, nine of the schedules provided did not include the maintenance frequency for assignments. Consequently, it would be difficult for a mechanic to know what maintenance is due for that month.
- The contractor's mechanics do not always initial the preventative maintenance schedules. The mechanic's initials serves as evidence that the mechanic performed preventative maintenance services on the equipment item. Furthermore, of the 52 schedules reviewed, no evidence was provided to verify that the mechanic's work had been certified by the contractor.
- CSF personnel are not verifying that the contractor is conducting bi-weekly cleaning of machine rooms, car tops, and pits.

We conducted additional testing to ensure that maintenance was being conducted for all assignments listed for a given month. We selected 6 months with the highest volume of maintenance assignments and reconciled the monthly maintenance schedule back to the unit history report. The history reports are generated out of the vendor's system and track the equipment by location and work performed (i.e. assignments completed).

For example, the month of January lists five types of maintenance assignments that should be conducted to an escalator. We wanted to ensure that there was evidence that maintenance was conducted for all assignments. We verified this by referring to the assignments listed for January back to the January unit history report. As illustrated in the following table, 66% of the required preventative maintenance assignments were not performed for the 6 months reviewed.

Required Preventative Maintenance Reconciliation High Volume Months – FY 2014				
Location	Equipment Type	Total Number of Required Assignments per Maintenance Schedule	Total Number of Assignments that Were Not Performed (i.e. not listed on History Report)	Percentage of Preventative Maintenance Assignments Not Performed
HBGCC	Elevators	297	173	58%
HBGCC	Escalators	399	285	71%
Alamodome	Escalators	42	32	76%
6 Month Totals:		738	490	66%

Without monitoring the preventative maintenance checklists/schedules and the unit history reports, CSF does not have assurance that the contractor performed all required preventative maintenance. Consequently, equipment that is not properly maintained may become unreliable and malfunction causing personal injury or an inconvenience to the general public attending events at the specified locations.

Recommendations

The CSF Director should:

- Verify that all preventative maintenance assignments are conducted and certified by performing a monthly reconciliation between the required preventative maintenance schedules to the completed maintenance listed on the unit history reports.
- Verify that maintenance schedules include sign-offs by the mechanic that conducted the maintenance, as well as by the person certifying their work.

Equipment Inspections

CSF personnel and the contractor are not complying with inspection requirements regarding weekly and annual state inspections on equipment items. Specifically, we noted the following:

- Evidence that weekly inspections were performed by the contractor on all equipment items was not provided by CSF personnel.
- City personnel are not always present during the annual state inspections as required by the contract.
- Annual state inspections were not performed 45 – 60 days before the inspection expiration date on 46 of 54 (85%) equipment items as required by the contract.
- CSF personnel were unable to provide evidence that repairs identified during the state inspections were completed within 60 days of the inspection date.

The contract states that the contractor shall make weekly inspections on equipment items. In addition, the contractor shall conduct annual state inspections on all elevators, escalators, and wheelchair lifts in the presence of the City's authorized representative.

Annual state inspections are to be completed 45 – 60 days before the expiration date so paperwork can be filed and new certificates received from the state before current certificates expire; and any repairs required or identified in the inspection report shall be completed within 60 days of inspection date, if possible, or sooner if required by the state inspector.

Without verifying that weekly and annual inspections are conducted in accordance to the contract terms, the risk of faulty equipment not being identified or repaired in a timely manner increases.

Recommendations

The CSF Director should implement monitoring controls to ensure that the contractor is performing weekly inspections on all equipment items. Additionally, standard processes should be established to ensure that a City representative is present during the annual state inspections, inspections are performed 45 – 60 days before the inspection expiration date, and any repairs required or identified in the inspection report are completed within 60 days of the inspection date.

Service Calls

The contractor is not complying with contractual terms regarding service calls and response times. Additionally, the City is not enforcing out of service credits for service calls not responded to within a two-hour timeframe as allowed by the contract.

Per contract terms, after receiving a call for service, contractor shall have a mechanic on-site within one hour for normal and emergency service calls. Additionally, the City may invoke an out of service credit in the amount of \$50 per hour if substandard conditions exist for longer than a two-hour period. Based on a review of service calls placed during 6 months in FY14, we noted the following results:

Service Call Response Times for 6 Months Reviewed in FY14 per HBGCC and Alamodome		
	Service Calls Not Responded to Within 1-Hour	Service Calls Not Responded to Within 2-Hours
HBGCC	59 of 103 (57%)	33 of 103 (32%)
Alamodome	28 of 29 (97%)	22 of 29 (76%)

Without ensuring that all service calls are responded to within the required timeframe of one-hour, equipment may be out of order for an excess amount of time. Additionally, the contractor may not consider the City's service calls to be a priority, since out of order service credits are not enforced by the City.

Recommendations

The CSF Director should:

- Implement a tracking control to monitor service call response times. Additionally, maintain support that would serve as evidence that untimely service calls are followed up on.
- Request out of service credits for service calls not responded to within a two-hour timeframe.

Appendix A – Staff Acknowledgement

Sandy Paiz, CFE, Audit Manager
Christopher Moreno, CFE, Auditor in Charge
Michael Hurlbut, CISA, Auditor

Appendix B – Management Response



CITY OF SAN ANTONIO

SAN ANTONIO TEXAS 78283-3966

June 26, 2015

Kevin W. Barthold, CPA, CIA, CISA
City Auditor
San Antonio, Texas

RE: Management's Corrective Action Plan for the Audit of Convention and Sports Facilities Contract for Elevator and Escalator Preventative Maintenance Services

The Convention and Sports Facilities (CSF) Department has reviewed the audit report and has developed the Corrective Action Plans below corresponding to report recommendations.

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
A	Non-Existence of a Contract Administration Plan (CAP) The CSF Director should develop a CAP for all administrative reviews to ensure that essential tasks are performed and monitoring functions are completed, and that essential support documentation is maintained.	3	Accept	Dacia Dunn/Contract Officer	May 15, 2015
	Action plan: CSF staff developed an initial CAP during the audit based on the City's Scope of Work in the Request for Competitive Sealed Proposals (RFCSP), and has since expanded on that framework to incorporate subsequent controls agreed upon between the parties. The CAP includes tasks to better monitor equipment preventative maintenance, repair, inspections, testing and response times. Moreover, as a result of this audit, the department has transferred the monitoring function of this contract to the CSF Contracts staff. At its inception, the contract was originally administered by CSF maintenance staff at the Convention Center and Alamodome. Transferring the administrative monitoring function to the Contract staff will ensure that essential support documentation is maintained as well as ensure compliance with key contractual terms.				
B	Lack of Support for Insurance Coverage The CSF Director should ensure that all insurance documents meet the requirements outlined in the contract by conducting initial reviews at the time the contract is established, as well as periodic reviews as needed when contracts are renewed and/or new terms are established. If it is deemed that insurance coverage is not required, support of an approved waiver should be kept on file.	4	Accept	Dacia Dunn/Contract Officer	June 12, 2015

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
	Action plan: Copies of insurance certificates and endorsements have been obtained by CSF staff from the contractor and current subcontractor, Central Texas Elevator, Inc. After the Finance-Risk Management Division reviewed the insurance documentation, it was determined that the contractor and subcontractor insurance documentation meets all contract requirements for their current coverage periods. CSF staff will continue to ensure on an annual basis that contractor and subcontractor insurance is current and in compliance with the insurance requirements of the contract.				
C	Verification of Personnel's Qualifications are Not Performed by CSF The CSF Director should implement monitoring controls to periodically review the contractor's personnel qualifications; documentation and support should be kept on file.	4	Accept	Dacia Dunn/Contract Officer	May 22, 2015
	Action plan: The contractor's proposal submitted for the City's Request for Competitive Sealed Proposals (RFCSP) included a Staffing Plan with mechanic certifications. On May 20, 2015, the contractor provided CSF with certifications for employees since the inception of the contract. Consequently, this information was submitted to the City Auditor's Office. CSF staff will continue to ensure on an annual basis the contractor's personnel qualifications are in compliance with the terms of the contract.				
D	Monitoring Controls Regarding Preventative Maintenance, Inspections and Service Calls are not Effective				
D1	Preventative Maintenance (PM) The CSF Director should: <ul style="list-style-type: none"> Verify that all preventative maintenance assignments are conducted and certified by performing a monthly reconciliation between the required preventative maintenance schedules to the completed maintenance listed on the unit history reports. Verify that maintenance schedules include sign-offs by the mechanic that conducted the maintenance, as well as by the person certifying their work. 	6	Accept	Dacia Dunn/Contract Officer	May 26, 2015
	Action plan: Although the audit findings show that the contractor is not complying with the preventative maintenance requirements, it is important to note that the data reviewed by the Auditor's Office does not reflect all preventive maintenance and inspections conducted. Historically, mechanics on staff have not documented all of their work or modules performed in the contractor system and preventative maintenance logs kept at the Convention Center. Moreover, the Maintenance Control Program (MCP) documents used by the City Auditor's Office in their analysis are not intended by the contractor as a lone preventative maintenance tool. These documents are required by the Texas Department of Licensing & Regulation (TDLR) and are intended to demonstrate to State inspectors the typical monthly maintenance plans for the equipment. Further, according to the contractor, these typical monthly maintenance plans are designed to be flexible according to individual equipment and may not correspond with actual monthly maintenance performed.				

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
	<p>In a letter to the Department (Attachment A), KONE certified that all 1) weekly and biweekly inspections, cleaning and preventative maintenance 2) monthly preventative maintenance, and 3) annual tests, State inspections and repairs have been completed in accordance with all industry and regulatory requirements. KONE further certified that all annual inspections were completed before any certificates expired and that any cleaning, preventative maintenance and testing were completed in a timely manner.</p> <p>In the future, KONE will ensure that mechanics on staff maintain better records of work performed. Moreover, CSF Contracts staff will work closely with KONE during monthly reconciliation meetings to ensure that all work required by contract is completed in a timely manner and signed-off by them to certify that work was completed.</p>				
D2	<p>Equipment Inspections The CSF Director should:</p> <ul style="list-style-type: none"> Implement monitoring controls to ensure that the contractor is performing weekly inspections on all equipment items. Additionally, standard processes should be established to ensure that a City representative is present during the annual state inspections, inspections are performed 45 – 60 days before the inspection expiration date, and any repairs required or identified in the inspection report are completed within 60 days of the inspection date. 	7	Accept	Dacia Dunn/Contract Officer	July 31, 2015
	<p>Action plan: As stated in our Management Response to item D1, it is important to note that the data reviewed by the Auditor's Office does not reflect all preventive maintenance and inspections conducted and although some inspections were not performed 45-60 days before the inspection expiration date, all annual State inspections were completed prior to their due dates.</p> <p>In order to comply with all contract terms in the future, CSF staff will initiate a contract change order with Finance-Purchasing Division to remove or reduce the 45-60 day requirement to complete annual State inspections prior to their due dates. Due to the unique operating schedules of CSF facilities, CSF staff requires greater scheduling flexibility in order to complete the State inspections. In addition, this modification will allow CSF staff to schedule the inspections at or close to 12 month intervals, thus minimizing costs.</p> <p>CSF staff is not qualified to observe and approve contractor's work, however, CSF will coordinate the scheduling and tracking of all annual State inspections with the contractor in advance of the due dates. Additionally, CSF will track and ensure receipt of the inspection reports the subcontractor is required to submit to CSF after completion.</p>				

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
D3	Service Calls The CSF Director should: <ul style="list-style-type: none"> Implement a tracking control to monitor service call response times. Additionally, maintain support that would serve as evidence that untimely service calls are followed up on. Request out of service credits for service calls not responded to within a two-hour timeframe. 	8	Accept	Dacia Dunn/Contract Officer	July 31, 2015
Action plan: Although the contractor has not responded in the past to several requests within one hour, the response time rates that are referenced in the audit report are negatively skewed by the fact that in some instances CSF staff may initiate a service call but may defer the response to the next business day or a more suitable time when there are no adverse impacts on facility operations or public safety and in order to maximize the use of free monthly Overtime Service Calls that are provided by the contract. The Department is working with the Purchasing Division on obtaining service credits related to a few service calls but these are not related to response times per se. As indicated previously, CSF may elect to have the contractor perform service calls at another specified time, in which case the service credit is not invoked. CSF pursues service credits when equipment is inoperable for a significant period of time resulting in an impact to facility operations or public safety. Going forward, CSF staff will initiate a contract change order with Finance-Purchasing Division to simplify the parameters for obtaining service credits. Further, CSF maintenance staff will notify CSF Contracts staff when equipment downtime has a negative impact on facility operations or public safety. At the monthly meetings, these incidents, as well as all response times exceeding 2 hours, will be reviewed. Service credits will be requested based on the new service credit parameters created.					

We are committed to addressing the recommendations in the audit report and the plan of actions presented above.

Sincerely,


 Michael Sawaya Director
 Convention and Sports Facilities Department

6/26/15
 Date


 Ed Belmares
 Assistant City Manager
 City Manager's Office

6/26/15
 Date

Attachment A



San Antonio Branch Office

Elevators Escalators

Date 06/03/2015

City of San Antonio
Convention, Sports, & Entertainment Facilities
600 Hemisfair Plaza Way
Building 277
San Antonio, TX 78205-3223
Attention: Michael J. Sawaya
Director

KONE Inc.
12017 Starcrest
San Antonio, TX 78247
Phone (210) 491-0485 X 219
Fax (210) 491-9774
Mobile (210) 393-1550
cliff.vanveen@kone.com

RE: Requested Elevator & Elevator Maintenance & Response Time Reports

Dear Mr. Sawaya:

Reports detailing maintenance performed and response times to service calls for elevator and escalator equipment at the San Antonio Convention & Sports Facilities Department are enclosed with this letter.

Please note that the information enclosed does not reflect all preventive maintenance and inspections conducted. Historically, mechanics on staff have not documented all of their work or modules performed in the system. Moreover, the Maintenance Control Program (MCP) documents used by the City Auditor's Office are not intended as a lone auditing tool. These documents are required by the Texas Department of Licensing & Regulation (TDLR) and are intended to demonstrate to State inspectors the typical monthly maintenance plans for the equipment. Further, these typical monthly maintenance plans are designed to be flexible according to individual equipment and may not correspond with actual monthly maintenance performed.

However, KONE certifies that all 1) weekly and biweekly inspections, cleaning and preventative maintenance 2) monthly preventative maintenance, and 3) annual tests, State inspections and repairs have been completed in accordance with the City's scope of services in the Request for Competitive Sealed Proposals (RFCSP), KONE's proposal in response to the City's RFCSP, and all industry and regulatory requirements. KONE further certifies that all of the aforementioned inspections were completed before any certificates expired and that any cleaning, preventative maintenance and testing were completed in a timely manner.

In the future, KONE will ensure that mechanics on staff maintain better records of work performed and will work closely with CSF staff during monthly reconciliation meetings to ensure that all work required by contract is completed on time.

Should you have any questions regarding this information, please contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Cliff van Veen", is written over a light blue horizontal line.

Cliff van Veen
Senior Sales Consultant
cc: Laura Turk, Branch Manager