

CITY OF EL PASO, TEXAS
REQUEST FOR COUNCIL ACTION (RCA)

DEPARTMENT: General Services Department
AGENDA DATE: July 15, 2008
CONTACT Jeff Belles, Director, 621-6821
Terrence Freiburg, Purchasing Manager, 541-4313
DISTRICT: All

SUBJECT:

APPROVE a resolution / ordinance / lease to do what? **OR AUTHORIZE** the City Manager to do what? Be descriptive of what we want Council to approve. Include \$ amount if applicable.

Award a performance contract to Johnson Controls Inc (JCI) for \$14,767,054 within the terms of RFQ 2007-073 awarded by City Council on August 28, 2007.

It is requested the City Manager be authorized to sign any contracts or documents required to affect this award and be authorized to exercise on behalf of the City any extensions of the contract.

As part of this award, the Director of General Services may without further authorization from City Council approve contract changes which are necessary for proper execution of the work and carrying out the intent of the project which are in accordance with applicable law and which do not make changes to the prices and which are within the appropriate budget.

This is a guaranteed performance contract. The Financial Services and General Services Department recommend award as indicated.

BACKGROUND / DISCUSSION:

Discussion of the what, why, where, when, and how to enable Council to have reasonably complete description of the contemplated action. This should include attachment of bid tabulation, or ordinance or resolution if appropriate. What are the benefits to the City of this action? What are the citizen concerns?

The City of El Paso issued RFQ 2007-073 for a City Wide Energy and Operational Savings Program. City Council awarded this project to JCI on August 28, 2007. During the last 7 months JCI has conducted a detailed review and engineering audit of numerous facilities, street lights and swimming pools. They have recommended numerous projects to reduce the City's energy consumption.

The projects are grouped in five categories; facility lighting improvements, facility mechanical improvements, facility HVAC control system upgrades, indoor pool solar heating and traffic signal upgrades. The facilities identified for these energy efficiency upgrades span the entire range of City facilities and include City Hall, police stations, parks, convention center, libraries, fire stations, museums, municipal centers and traffic signals.

All of the projects are detailed in the scope of work. These projects will reduce the City's annual electric consumption by 18,643,000 kWh and the City's annual natural gas consumption by 324,000 CCF. The annual savings, based on the current utility costs and usage, are approximately \$1,800,000 per year for the next ten years.

This is a guaranteed performance contract. JCI guarantees the cost savings as detailed in the facility improvement measures and services. Should the City not recognize these utility reductions, JCI will reimburse the City for the difference. The \$14,767,054 construction costs will be offset by the reduced utility costs over the next ten years.

PRIOR COUNCIL ACTION:

Has the Council previously considered this item or a closely related one?

No. This is the first performance contract the City has utilized.

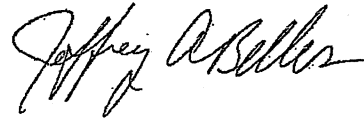
AMOUNT AND SOURCE OF FUNDING:

How will this item be funded? Has the item been budgeted? If so, identify funding source by account numbers and description of account. DeptID/account/fund/project.

\$5 million State Energy Conservation Office (SECO) loan
\$10 million Banc of America Public Capital Corp Lease

*****REQUIRED AUTHORIZATION*****

DEPARTMENT HEAD: Jeffrey A Bellis, May 28, 2008



APPROVED FOR AGENDA:

CITY MANAGER: _____ **DATE:** _____

PROJECT FORM

DATE: June 17, 2008

PROJECT: City-Wide Energy and Operational Savings Program

SOLICITATION NO: 2007-073R

DEPARTMENT: General Services

BUDGET NO:

FUNDING SOURCE: State Energy Conservation Office (SECO)
Municipal Lease

REPRESENTATIVE DISTRICT(S): All

RECOMMENDATION: Vendor: Johnson Controls, Inc.
Irving Tx
Item: All
Amount: \$14,767,054

Discussion and Action that the City exercises its option to initiate a guaranteed performance contract through Solicitation No. 2007-073R (City-Wide Energy and Operational Savings Program) with Johnson Controls, Inc. pursuant to the provisions of the award approved by City Council on August 28, 2007.

Additionally, it is requested that the City Attorney's Office review and that the City Manager be authorized to execute any related contract documents and agreements necessary to effectuate this award.

BIDS SOLICITED- 4 (1 local)
BIDS RECEIVED- 4
"NO BID" RECEIVED 0

TOTAL RECOMMENDED AWARD: \$14,767,054
Estimated total expenditures

COUNCIL APPROVED [] REJECTED [] MUNICIPAL CLERK _____

APPROVED:

COUNCIL MEETING DATE: July 15, 2008

Terrence Freiburg
Purchasing Manager
Financial Services Department, Purchasing Division
cc: BID FILE

City of El Paso

Johnson Controls Phase I Energy Savings Performance Contract

City Uses Utility Savings To Upgrade Infrastructure

The City of El Paso recognized that it needed to address two major issues: escalating utility costs and aging infrastructure. It also was one of the municipalities faced with a Texas state mandate to improve air quality by lowering electricity usage. The City partnered with Johnson Controls, a global leader in energy conservation services, to revitalize the infrastructure in 53 City facilities (2.1 million sq. ft.) and 6,600 traffic signals while lowering energy consumption. Improvements will be implemented at facilities throughout the City, including libraries, recreation centers, pools, senior citizen centers, police stations, museums, city hall, theatres and convention center.

Challenges

- Reduce utility costs.
- Comply with Texas State Senate Bill 12 requirements to reduce electricity consumption by 5 percent annually from 2007 to 2013.
- Modernize the infrastructure of the city's largest energy consuming buildings without spending capital dollars.

Johnson Controls Solutions

- Perform \$14.7 million in infrastructure improvements, including new HVAC equipment, lighting upgrades, building management systems, solar heating systems and traffic signal upgrades.
- Partner with the State Energy Conservation Office (SECO) to utilize the Texas LoanSTAR program to validate and assist in financing the project.
- Utilize the performance contracting financing method, where costs of the project will be offset over time through the energy and operational savings generated by the improvements.
- Secure approximately \$300,000 in available rebate money from El Paso Electric.

Results

- Projecting \$20.3 million reduction in operating costs over the 10-year contract term.
- Eliminating nearly 11,300 tons of pollutants from the air annually, which equates to removing about 1,950 cars from the road each year.
- Reducing electric consumption by 30 percent at 53 facilities.
- Reducing electric consumption by 84 percent for 6,600 traffic signals.
- Promoting City Renewable Energy Program by installing new solar heating systems at eight (8) indoor pool facilities.
- Utility bill analysis has identified corrections that will save the City \$134,000 per year.

#

City of El Paso - ESPC Project
 UCRM Summary Sheet
 05/13/08

UCRM #	FIM description	Simple Payback Years	Cost	Guar. Annual Electric kWh Savings	Guar. Annual Electric kW Savings	Guar. Annual Electric Cost Savings	Guar. Annual Gas CCF Savings	Guar. Annual Gas Cost Savings	Annual O&M Cost Savings	Guar. Annual Total Cost Savings
1	Lighting Improvements - General Services	6.8	\$ 1,750,137	2,638,142	5,136	\$ 237,605	0	\$ -	\$ 18,000	\$ 255,605
1	Lighting Improvements - Parks	10.1	\$ 1,000,640	934,181	2,325	\$ 88,762	0	\$ -	\$ 10,000	\$ 98,762
1	Lighting Improvements - CVB	8.6	\$ 618,504	594,582	2,001	\$ 64,575	0	\$ -	\$ 7,000	\$ 71,575
2	Mechanical Improvements - General Services	26.2	\$ 1,601,476	487,797	590	\$ 36,206	0	\$ -	\$ 25,000	\$ 61,206
2	Mechanical Improvements - Parks	27.5	\$ 1,185,962	85,225	11	\$ 6,646	21,206	\$ 18,539	\$ 18,000	\$ 43,185
2	Mechanical Improvements - CVB	14.0	\$ 388,623	147,131	0	\$ 8,023	14,260	\$ 12,681	\$ 7,000	\$ 27,704
3	HVAC Control System Upgrades - General Services	7.5	\$ 2,115,178	2,753,258	294	\$ 184,980	91,458	\$ 81,179	\$ 15,000	\$ 281,159
3	HVAC Control System Upgrades - Parks	9.4	\$ 575,986	469,795	0	\$ 31,978	28,449	\$ 25,232	\$ 4,000	\$ 61,210
3	HVAC Control System Upgrades - CVB	16.9	\$ 961,811	644,720	25	\$ 46,190	5,165	\$ 4,607	\$ 6,000	\$ 56,797
4	Indoor Pool Solar Heating - Parks	6.1	\$ 885,141	0	0	\$ -	163,020	\$ 144,007	\$ -	\$ 144,007
5	Traffic, Pedestrian & Flasher Signal Upgrades	4.6	\$ 2,978,570	9,888,132	0	\$ 582,192	0	\$ -	\$ 60,000	\$ 642,192
	Construction M&V		\$ 84,753							
	Construction Bonding Cost		\$ 50,852							
	Construction Management & Training		\$ 569,421							
	Project Selections	8.5	\$ 14,767,054	18,642,963	10,382	\$ 1,287,157	323,558	\$ 286,245	\$ 170,000	\$ 1,743,402

JCI Project - Annual Energy Impacts

Dept	kWh Savings	% kWh Savings	kW Savings	% kW Savings	CCF Savings	% CCF Savings
Facilities - General Services	5,879,197	31%	6,020	14%	91,458	30%
Facilities - Parks	1,489,201	24%	2,336	13%	212,675	41%
Facilities - CVB	1,386,433	29%	2,026	12%	19,425	22%
Signals - Streets	9,888,132	84%	NA	NA	NA	NA
Totals	18,642,963	45%	10,382	13%	323,558	35%

EPE Utility Rebates	2007	2008
	\$ 174,000	\$ 174,000

Notes:

1. General Services facilities include: Fire Dept, Public Library, Museums & Cultural Affairs, Police Dept
2. CVB facilities include: Convention Center, Chamber Bldg, Chavez Theater, Parking Garage, Plaza Theater

Project Benefits	Escalation	Imp.Period	2010 Year 1	2011 Year 2	2012 Year 3	2013 Year 4	2014 Year 5	2015 Year 6	2016 Year 7	2017 Year 8	2018 Year 9	2019 Year 10	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Utility Cost Avoidance													
Electricity	3.0%	514,863	1,287,157	1,325,772	1,365,545	1,406,511	1,448,707	1,492,168	1,536,933	1,583,041	1,630,532	1,679,448	15,270,675
Natural Gas	3.0%	57,249	286,245	294,832	303,877	312,788	322,171	331,836	341,791	352,045	362,607	373,485	3,338,727
Other Utility	3.0%	0	0	0	0	0	0	0	0	0	0	0	0
O&M Cost Avoidance													
Facility Lighting O&M	0.0%	0	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	350,000
HVAC O&M	0.0%	0	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	750,000
Signal Lighting O&M	0.0%	0	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	600,000
Other O&M	0.0%	0	0	0	0	0	0	0	0	0	0	0	0
Capital Cost Avoidance													
Lighting Capital		0	0	0	0	0	0	0	0	0	0	0	0
HVAC Capital		0	0	0	0	0	0	0	0	0	0	0	0
Signal Lighting Capital		0	0	0	0	0	0	0	0	0	0	0	0
Other Capital		0	0	0	0	0	0	0	0	0	0	0	0
Total Project Benefits		572,112	1,743,402	1,790,604	1,839,222	1,889,299	1,940,878	1,994,004	2,048,724	2,105,086	2,163,139	2,222,933	20,309,402

Project Costs													
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Debt Service													
Annual P&I Payment (SECO)		0	602,499	602,499	602,499	602,499	602,499	602,499	602,499	602,499	602,499	602,499	6,024,990
Annual P&I Payment (Other)		0	1,545,692	1,048,320	1,092,740	1,138,512	1,185,640	1,234,188	1,284,188	1,335,680	1,366,475	1,361,000	12,592,435
Annual Service Agreements													
APG Services	3.0%	0	153,322	129,474	133,358	137,359	141,480	145,724	150,096	154,599	159,237	164,014	1,468,662
Other Service	3.0%	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Costs		0	2,301,513	1,780,293	1,828,597	1,878,370	1,929,619	1,982,411	2,036,783	2,092,778	2,128,211	2,127,513	20,086,087

Cost-Benefit Analysis													
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Annual Cash Flow		572,112	(558,111)	10,311	10,625	10,929	11,259	11,593	11,941	12,308	34,928	95,420	223,315
Cumulative Cash Flow		572,112	14,001	24,312	34,937	45,866	57,125	68,718	80,659	92,967	127,895	223,315	223,315

Financial Criteria	
Total Project Cost	\$ 14,767,054
Client Contribution	\$ -
Utility Incentive	\$ -
Net Amount Financed	\$ 14,767,054
Finance Term	10 years
Construction Period	18 months
Interim Interest Period	18 months
Service Agreement Term	10 years
Payments Per Year	4
Debt Payment Timing	Arrears

Financing:

Source	Financed Amount	Interest Rate
SECO	\$5,000,000	3.0 %
Municipal Lease	\$9,767,054	4.062

**MOTION
AUGUST 28, 2007**

Motion made by Representative Ortega, seconded by Representative Byrd, and unanimously carried to **AWARD** BID Solicitation No. 2007-073R (City-Wide Energy and Operational Savings Program) to Johnson Controls, Inc. for a total award of \$240,000.

Department:	General Service
Award to:	Johnson Controls, Inc. Irving, TX
Items:	All
Account No.:	31010328 – 01101 - 502226
Funding Source:	Building Maintenance-Operating Account- Bldg/Facilities Maintenance Contracts
Total Award:	\$240,000

The Review Committee based on evaluation factors established for this RFQ recommend award to Johnson Controls, Inc. the highest rated firm. The Departments of Financial Services and General Service recommend award as indicated.

Additionally, it is requested that the City Attorney's Office review and that the City Manager be authorized to execute any related contract documents and agreements necessary to effectuate this award.

NOT PRESENT FOR THE VOTE: Representative Castro

Richarda Duffy Momsen, City Clerk

KINSMAN & ASSOCIATES, Consulting Engineers
Systems Analysis and Design

June 23, 2008

Mr. Gerardo Velazquez
City Energy Manager
The City of El Paso
2 Civic Center Plaza
El Paso, Texas 79901

Dear Mr. Velazquez:

We have completed our third-party review of the Phase I Utility Assessment Report (UAR) prepared by Johnson Controls, Inc. dated June 11, 2008. It is anticipated that this revised document will be submitted to the City of El Paso (City) and will form the technical basis for an Energy Performance Contract between the City and Johnson Controls.

This letter report is being sent to you at this time so that the above mentioned revised UAR and a copy of this letter can be forwarded without delay to the State Energy Conservation Office (SECO) to obtain partial funding (\$5,000,000) for this project through the LoanSTAR Program.

When a final draft of the contract between the City and Johnson Controls is available, we will be pleased to review it to ensure that the technical interests of the City are protected in the contract documents. The initial draft that we have reviewed did not seem to include a requirement for Construction and Payment Bonds. Furthermore, the June 11, 2008 UAR should be included in the final contract wording as a referenced contract document.

We have found that the revised UAR, dated June 11, 2008, meets the standards for funding in terms of requirements stipulated by the current LoanSTAR Guidebook for the \$5,000,000 funding and the State of Texas Local Government Code 302 for the entire project.

To determine this we visited a large percentage of the facilities (most of the square footage) included in the subject UAR, met with Johnson Controls, and shared multiple communications with Johnson Controls by telephone and email. Our review not only included the text and data in the UAR but also backup information used to develop the UAR. Considerable time was spent reviewing the technical data and savings calculations in the original and revised submissions, pricing backup, the Measurement and Verification Plan, a sample annual savings report, and an initial draft of the contract for this project.

Our specific findings related to final documentation provided to us by Johnson Controls are as follows:

1. Johnson Controls' project descriptions are adequate and correlate with on-site observations.

It should be kept in mind that the subject UAR is not intended to be a design document. However, in our review we obtained all necessary information related to design considerations which allowed us to approve these UCRMs.

2. Johnson Controls' proposed UCRMs are appropriate solutions to existing conditions.

This statement should not be taken to infer that all energy-savings projects that could be identified at these facilities were included. However, with the financial and payback criteria that had to be met, the proposed UCRMs are a good choice for a first phase.

3. Johnson Controls' method of calculating energy savings are reasonable and meet acceptable standards.

During the review process we verified data used for inputs, calculation methods, and formulas used, and we checked results for accuracy and reasonableness.

4. Johnson Controls' revised savings appear attainable.

During the review process we compared the paybacks of the selected UCRMs with those of similar UCRMs and found them comparable when consideration was given to differences in equipment operating hours.

5. Johnson Controls' project prices are reasonable and price/benefit ratios are in balance.

Our methods used to verify the reasonableness of prices included: (1) buildup of UCRM price from RS Means Cost Data and then adding reasonable general contractor markups, (2) comparison with supplier data in our files on similar projects or materials, (3) comparison of price for services such as Test & Balance (as a percent of total price) with usual bids for such services, and (4) the HVAC controls pricing acceptance was based on a reasonable price per point.

The prices proposed by Johnson Controls, coupled with reasonable savings (including O&M), result in what we believe to be reasonable price-to-benefit ratios (paybacks).

Mr. Gerard Velazquez
June 23, 2008
Page 3

6. Johnson Controls' revised Measurement and Verification (M&V) Plan is reasonable.

The methods proposed include all three International Measurement and Verification Protocol (Options A, B and C). They are applied appropriately for different UCRMs and facilities. We have reviewed their plans and methods beyond what is included in the subject UAR and find that their regression analyses for weather corrections and other formulas for other contingencies are now adequate. It is our understanding that these backup details were not desired by the City to be included in the UAR, but will be delivered to the City during the construction phase of the work.

It should be noted that the subject UAR contains two financial analyses in Section VII. These have been provided to separate out the \$5,000,000 of UCRMs (with their related support service – APG) to be funded by LoanSTAR from those to be funded through a Municipal Lease. The LoanSTAR projects meet LoanSTAR Guidelines; e.g., no base year utility rate escalations, 10-year payback, no O&M savings which might not meet LoanSTAR requirements, and positive cash flow each year of a 10-year contract. The remaining UCRMs with their related costs meet the requirements of the Texas Local Government Code 302; in fact, the entire combined project will also meet the requirements of the Texas Local Government Code 302.

In providing this third-party review, we attest that we have no known conflict of interest with either Johnson Controls, Inc. or the City of El Paso.

Sincerely,



Boyce Farrar III, P.E.
Senior Engineer

/pt

cc: Ms. Theresa Sifuentes, SECO

VII. PROJECT FINANCIAL ANALYSIS

Total installation project price is \$14,767,054. City plans to utilize a \$5M loan from the State Energy Conservation Office (SECO) and a municipal lease purchase loan for the remaining project costs to pay for this project over a 10-year period.

Annual Assured Performance Guarantee (APG) services are escalated at 3% per year to cover annual increases in salaries, benefits and materials.

Cost for Year 1 APG services is higher than Year 2 due to the requirement for additional labor hours during the first year to set up the initial M&V procedures.

Annual APG services are described in Appendix E.

Business Case Analysis – Local Government Code 302 Version

The Phase I ESPC project meets all the financial requirements of Local Government Code 302. Local Government Code 302 states that the maximum term is 15 years. Code 302 also states that the local government annual costs in any one year must not exceed the total project savings (over the full term) divided by the number of years in the contract term. Annual costs include finance costs and measurement & verification (M&V) costs. Utility cost savings can be escalated each year to account for future increases of electric and natural gas prices.

Total guaranteed savings over the 10-year period is \$20,309,402.

Total project costs over the 10-year period is \$20,091,562. These costs include financing debt services and APG services.

Estimated financing debt services are based on a 3.0% SECO interest rate, a 4.17% municipal lease purchase interest rate, a 18-month construction period and quarterly payments in arrears. City Finance Department will establish the final debt services.

Utility savings are escalated at 3% per year. According to DOE historical data, consumer prices for retail electricity increased an average of 5.5% per year from 1970 – 2001.

Business Case Analysis – SECO Version

The Phase I ESPC project meets all the financial requirements of the SECO LoanSTAR program. SECO program states that the maximum term is 10 years and the simple payback period for the project must be less than 10 years (excluding finance costs). Annual costs include measurement & verification (M&V) costs. Utility cost savings each year must represent current electric and natural gas prices.

The SECO \$5M loan will fund UCRM #3 and UCRM #4, in addition to a portion of the Construction M&V, Bond Cost and Management & Training.

The following table provides a summary of UCRMs and project costs for the SECO loan:

UCRM #	FIM description	Simple Payback Years	Cost	Guar. Annual Electric kWh Savings	Guar. Annual Electric kW Savings	Guar. Annual Electric Cost Savings	Guar. Annual Gas CCF Savings	Guar. Annual Gas Cost Savings	Annual O&M Cost Savings	Guar. Annual Total Cost Savings
3	HVAC Control System Upgrades	9.4	\$ 3,652,975	3,956,830	334	\$ 270,139	133,767	\$ 118,911	\$ -	\$ 389,050
4	Indoor Pool Solar Heating	6.6	\$ 885,141	0	0	\$ -	150,749	\$ 133,173	\$ -	\$ 133,173
	Construction M&V		\$ 55,524							
	Construction Bonding Cost		\$ 33,315							
	Construction Management & Training		\$ 373,045							
	Totals	9.6	\$ 5,000,000	3,956,830	334	\$ 270,139	284,516	\$ 252,084	\$ -	\$ 522,223

Total guaranteed energy savings over the 10-year period is \$5,380,702.

Total project costs over the 10-year period is \$5,220,000. These costs include APG services.

Project financial analysis for both Local Government Code 302 version and SECO project are shown in the following Business Case Analysis.

SIEMANS BUILDING TECHNOLOGIES
ATTN: CHAD NOBLES
8850 FALLBROOK
HOUSTON, TX 77064

JOHNS~~ON~~ CONTROLS
1320 GOODYEAR DRIVE
EL PASO TX 79936

CONTROL AND EQUIPMENT CO.
2001 E. YANDELL
EL PASO TX 79903

JOHNS~~ON~~ CONTROLS
MICHAEL CONTROLS
507 E. MICHIGAN STREET
MILWAUKEE, WI 53202