

Council Meeting  
November 17, 2009

Honorable Mayor and Members  
of the Torrance City Council  
City Hall  
Torrance, California

**PUBLIC HEARING**

**Members of the Council:**

**SUBJECT: City Manager/General Services – Consider the General Services Department’s recommendation to authorize award of a sole source Energy Services Contract with Johnson Controls, Inc. as allowed under Government Code Section 4217.12**

**Expenditure: None**

**RECOMMENDATION**

Recommendation of the General Services Director that City Council :

- 1) Hold a public hearing to consider a sole source energy service contract with Johnson Controls, Inc; and
- 2) Adopt a Resolution authorizing the award of a sole source energy service contract with Johnson Controls Inc. as conditioned.

**Funding** Not Applicable

**BACKGROUND**

In July 2009 the City of Torrance applied and was provided formula grants under the American Recovery and Reinvestment Act of 2009 (ARRA), Public Law 111-5, Energy Efficiency and Conservation Block Grant (EECBG) Program. The City has been awarded \$1,462,300 in energy grants under this program. Projects identified for funding under this program are listed in Attachment A.

During the process to receive EECBG funds, the City contracted with Johnson Controls Inc. (JCI) to review projects which could be submitted under the EECBG program and assist City staff to complete necessary documents required to obtain the grant funding. Included in the contract was the completion of a preliminary audit by JCI to determine the feasibility of an Energy Services Contract, also known as an Energy

Savings Performance Contract (ESPC), for completion of other projects for added energy savings. An ESPC is a compilation of energy savings projects paid for over time by the savings generated by the completed work. Attachment B contains a more thorough explanation of the ESPC process.

In October 2009 the Council adopted a Resolution authorizing the borrowing of funds from the California Energy Commission to fund energy upgrades in the amount of \$ 3 million. The application for this financing was submitted to the CEC on November 5, 2009. Approval by the CEC for special financing is not binding and would be dependent on acceptance by Council of an underlying program of energy conservation projects to be brought for consideration at a future date.

As authorized by Council in October, City and Johnson Controls staff are working to complete a detailed audit for each potential energy project to determine costs, estimated savings and development of measurement and verification plans for a proposed Energy Savings Contract.

If approval of the sole source contracting Resolution, is granted, Attachment C, staff has recommended that the 3 projects presently funded by EECBG grants be combined with additional projects funded by other funding sources to include CEC approved financing.

## **ANALYSIS**

Under the California Government Code Section 4217.10 the City of Torrance is authorized to enter into Energy Service Contracts for the development of energy conservation, co-generation and alternate energy supply sources, without competitive bidding.

In accordance with California Government Code Section 4217.12. the City of Torrance may enter into an energy service contract on such terms as its governing body determines are in the best interests of the public agency if the determination is made at a regularly scheduled public hearing, public notice of which is given at least two weeks in advance, and if the determination is made at a regularly scheduled public hearing, a notice is given two weeks in advance, and that the energy savings over a reasonable period of time generated by the project will be equal to or greater than the project costs.

Two groups of projects have been identified for accomplishment by an Energy Savings Performance Contract. Both groups of projects are identified in Attachment A.

The first group includes the 3 projects approved and financed the ARRA Energy Efficiency and Conservation Block Grant (EECBG) Program. The City was awarded

\$1,462,300 in energy grants under this program for completion of these projects. These projects would generate annual savings of \$69,000

The second group of projects, with a current estimate of \$4.7 million, could be accomplished using funding from CEC or other possible financing sources. These projects would generate \$383,000 in annual savings. The savings generated would be \$236,000 for electrical projects and \$147,000 for water related projects.

The savings generated will exceed project costs to include financing costs over the term of the contract.

Both EECBG and CEC financing was originally provided by the American Recovery and Reinvestment Act of 2009 (ARRA). ARRA projects have short deadlines for accomplishment of August 21, 2012 for EECBG program projects and March 31, 2012 for CEC program projects. To accomplish the number of projects in the allotted time span, the City's traditional means of design, bid and execution of projects using existing city resources will not allow completion of all projects within mandated program (ARRA) deadlines. Staff is recommending accomplishment via an Energy Savings Contract.

Accomplishment of projects through an Energy Savings Contract has several benefits:

1. Savings generated will exceed project costs over the term of the contract.
2. Projects will be accomplished much quicker than possible using traditional methods of individual bidding and management by City staff.
3. Annual energy savings will be realized within 12-24 months.
4. Energy savings are guaranteed by the performing contractor, Johnson Controls Inc.
5. The City would begin to achieve reductions in their carbon footprint as required by AB32 legislation.

Energy Savings Contracts, as are all contracts, are not risk free. These risks include the financial stability of the contractor (will the be around through the term of the contract), baseline energy use calculations and assumptions used in development of future savings calculations (usage rates, temperature set points, operation hours, utility consumption).

Staff will review these issues with an option for additional review by City hired consultants familiar with these contracts. CEC funded programs are also reviewed by their internal staff both prior to financing approval. A number of meetings/workshops will also be held to prior to bringing back a final ESC contract to review these areas and propose methods of accomplishment to minimize risk.

As an additional means to reduce risk for ESC accomplished work, not including EECBG program projects, only utility savings (electric, water, gas usage reductions) will be used for payback calculations. All labor and material savings will return to the City of Torrance. Labor and material savings are both difficult to estimate and also are often not true savings as labor and material budgets are not realized as budget reductions but redirected to other maintenance needs within the City. In this way calculations will only be based on energy consumption before and after project completion.

All savings from EECBG projects (\$1.4 million) will return directly to the City, as these projects are grant funded with no reimbursement required.

The proposed ESC contract with JCI will include the following elements to minimize risk and ensure competitive pricing.

1. Subcontracting with multiple local vendors for each element of work as applicable.
2. Open bidding practices with City review of bid prices from all parties.
3. No contract changes other than City requested changes
4. City review and approval of equipment and layout specification.
5. Work will be performed as a Turnkey type project
6. JCI guarantees for program cost and continued performance.
7. JCI as a large international company has the experience and staff to quickly and professionally complete the work. JCI has a long history of successful completion of Performance Contracts for government agencies. They also have the financial wherewithal to guarantee energy savings to ensure that stated savings are realized.
8. JCI was ranked as the top vendor for Energy Services by the State Department of General Services.

The General Services Department is recommending the City Council of the City of Torrance adopt a Resolution, Attachment C, authorizing award a sole source energy services contract to Johnson Controls, Inc. per Government Code Section 4217.12.

On Council authorization of a resolution for Sole Source contracting for an Energy Savings Contract, City and JCI staff will meet in a number of workshops for Measurement and Verification Plans; Baseline Calculations; Construction; and Contracts and Financing

Award of an Energy Savings Contract with Johnson Controls Inc., will be subject to the following conditions

1. Completion of a detailed analysis of energy savings projects under consideration.

2. Completion and acceptance of a measurement and verification plan for all projects.
3. Council approval of terms and conditions for the contract with JCI for energy savings projects.

The proposed contract will be brought for consideration at a future date.

Respectfully submitted,

SHERYL BALLEW  
General Services Director



By Jon Landis  
Facility Services Manager

CONCUR:

  
Sheryl Ballew  
General Services Director

  
LeRoy J. Jackson  
City Manager

Attachments:

- A – EECGB grant and tentative ESPC project lists
- B – ESPC outline
- C – ...Resolution

Energy Efficiency and Conservation Block Grant Projects and  
Energy Savings Performance Contract Projects (tentative)

<u>Energy Efficiency and Conservation Block Grant Projects*</u>	Cost	Incentives	Actual Costs	Savings	Savings %	Payback/Yr
Energy Efficient Retrofits	\$1,098,710	\$44,042	\$1,054,668	\$31,055	3%	34.0
City Services - HVAC Upgrade & Controls						
City Hall Parking Lot LED Lighting	\$426,685	\$19,053	\$407,632	\$38,106	9%	10.7
Street Security Lighting Replacements	\$1,525,395	\$63,095	\$1,462,300	\$45,157	3%	32.4
<u>Energy Savings Performance Contract Projects</u>						
Lighting Upgrades	\$611,779	\$63,094	\$548,685	\$95,443	17%	5.7
HVAC Upgrades	\$611,540	\$0	\$611,540	\$32,237	5%	19.0
Energy Management System / HVAC Controls Upgrades & Retrofits	\$484,000	\$0	\$484,000	\$45,478	9%	10.6
HVAC Fan and Pump Variable Frequency Drives	\$96,000	\$5,963	\$90,037	\$8,945	10%	10.1
Water Conservation - Irrigation Controls Upgrade	\$1,079,539	\$0	\$1,079,539	\$147,210	14%	7.3
Renewable Energy - Pool Solar Water Heating	\$285,027	\$0	\$285,027	\$35,676	13%	8.0
Cable Building HVAC Upgrade	\$275,307	\$2,994	\$272,313	\$7,325	3%	37.2
Ball Park Lighting Upgrades	\$668,800	\$7,146	\$661,654	\$11,433	2%	57.9
Project Management	\$616,799		\$616,799			
	\$4,728,791	\$79,197	\$4,649,594	\$383,747	8%	12.1
<u>Other Potential Projects</u>						
9 Ball Park Lighting Upgrades	\$353,333	\$2,416	\$350,917	\$3,866	1%	90.8
Renewable Energy - Concentrated PV	\$848,000	\$432,000	\$416,000	\$37,800	9%	11.0
Illuminated Street Signs Replaced with Reflective Street Signs	TBD	TBD	TBD	TBD	TBD	TBD
Low Flow Plumbing Fixtures	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	TBD	TBD	TBD	TBD	TBD

All figures are current ESTIMATES

TBD = To Be Determined

\* includes Project Management

## Energy Savings Performance Contracting

The Energy Savings Performance Contracting (ESPC) was established within the State of California to assist local government agencies in reducing facility costs. By making capital investments in energy conservation measures (ECMs) municipalities, such as the City of Torrance, would reduce operating expenditures with facilities benefiting from improved energy performance and reduced energy expenditures. An ESPC can apply to contracts involving energy conservation measures and energy-efficient systems, water conservation, as well as to contracts involving renewable energy systems.

If capital funds are not available for such projects, a third party, an energy service company (ESCO) such as Johnson Controls, often provides capital for purchase and installation of new equipment in exchange for a share of the agency's energy cost savings. When the third party guarantees a specific level of savings, the arrangement is known as an energy savings performance contract, or ESPC.

In an ESPC, a third party makes an investment in a facility that reduces its operating (primarily energy) costs. The third party receives periodic payments that come from a share of the reduced cost savings during the term of the contract. The energy savings realized provide the income stream that finances the project. After the contract period ends, the agency retains all of the savings.

A key element in the performance contract is the means and methods to verify savings realized. Measuring and verifying (M&V) savings from ESPC projects requires special project planning and engineering activities. Standardized practices and procedures for M&V are included in the 1998 International Performance Measurement and Verification Protocol (IPMVP) which provides an overview of current M&V techniques and sets a framework for verifying third-party-financed energy projects for public sector projects. The IPMVP is intended to be used as the basis for preparing program M&V guidelines.

The selection and tailoring of specific M&V options is based on the level of M&V precision required to obtain the desired accuracy level in the savings determination and is dependent on:

- The complexity of the Energy Conservation Measure
- The potential for changes in performance
- The measured savings value

The intent of the M&V plan is to balance the three following related elements:

- The cost of the M&V Plan
- Savings certainty
- The benefit of the particular conservation measure

## RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TORRANCE AUTHORIZING THE CITY OF TORRANCE TO AWARD A SOLE SOURCE ENERGY SERVICE CONTRACT TO JOHNSON CONTROLS INC.**

**WHEREAS**, the California Government Code Section 4217.10 authorizes public agencies to enter into energy service contracts for the development of energy conservation, co-generation and alternate energy supply sources, without competitive bidding.

**WHEREAS**, in accordance with California Government Code Section 4217.12, a public agency may enter into an energy service contract on such terms as its governing body determines are in the best interests of the public agency if the determination is made at a regularly scheduled public hearing, public notice of which is given at least two weeks in advance, and if the determination is made at a regularly scheduled public hearing, a notice is given two weeks in advance, and that the energy savings over a reasonable period of time generated by the project will be equal to or greater than the project costs.

**WHEREAS**, the General Services Department is recommending the City Council of the City of Torrance authorize award a sole source energy services contract to Johnson Controls, Inc. per Government Code Section 4217.12.

**WHEREAS**, on November 3, 2009, the City of Torrance published notice of the public hearing regarding the award of a sole source energy service contract in the Daily Breeze.

**WHEREAS**, on November 17, 2009, the City Council of the City of Torrance conducted a public hearing on the recommendation of the General Services Department that the City Council of the City of Torrance authorize the award a sole source energy services contract to Johnson Controls, Inc.

**WHEREAS**, the City Council of the City of Torrance does hereby find and determine as follows:

- A) 1 percent financing for energy savings from the California Energy Commission requires completion of all work and expenditure of all funds by March 31, 2012.
- B) American Recovery and Reinvestment Act of 2009 (ARRA), funding for Energy Efficiency and Conservation Block Grant (EECBG) projects require completion of all work and expenditure of all funds by August 21, 2012
- C) Traditional means of design, bid and execution of projects using existing city staff will not allow completion of all energy saving projects within mandated ARRA deadlines.
- D) Energy savings will be guaranteed by Johnson Controls, Inc.

- E) Energy savings from the energy service contract will be equal or greater to project costs over payback term of the contract.
- F) It is in the best interest of the City of Torrance to award a sole source energy savings contract to achieve available savings.

**NOW THEREFORE, BE IT RESOLVED**, that the City Council of the City of Torrance authorizes the City of Torrance to award a sole source energy service contract to Johnson Controls Inc., for completion of an Energy Savings Contract (ESC). Award of the ESC will be subject to the following conditions:

- A) Completion of a detailed analysis of energy savings projects under consideration
- B) Completion and acceptance of a Measurement and Verification Plan for ALL projects.
- C) Council approval of terms and conditions for the contract with JCI.

**BE IT FURTHER RESOLVED**, that Mayor of the City of Torrance is hereby authorized and empowered to execute in the name of the City of Torrance all necessary documents to implement and carry out the purpose of this resolution, and to undertake all actions necessary to undertake and complete the energy efficiency projects.

Passed, Approved and Adopted this \_\_\_\_\_ day of November, 2009.

\_\_\_\_\_  
Mayor Frank Scotto

ATTEST:

\_\_\_\_\_  
Sue Herbers, City Clerk

APPROVED AS TO FORM:

JOHN L. FELLOWS III, City Attorney

By: \_\_\_\_\_  
Patrick Q. Sullivan, Assistant City Attorney