M E M O R A N D U M

DATE: May 13, 2008

TO: City Council Members

FROM: Jennifer Bruno, Budget & Policy Analyst

RE: Request for use of "Energy Fund for the Future" funds

BACKGROUND

In the FY 2008 budget process, the Council approved a one-time appropriation of **$500,000**, to be called the "Energy Fund for the Future." At the time the funds were approved, there were no detailed criteria about how and when these funds would be used. The Administration did make the following general statement with regard to the use of these funds, that they would be used to maintain the City's leadership on environmental issues. The Council made the appropriation "contingent upon City Council pre-approval of expenditures," so that the Administration would come back to the Council when they identified a potential use for these funds. This enables the Council to have a meaningful policy discussion about how these funds should be allocated, absent any adopted criteria for the "Energy Fund for the Future."

KEY ELEMENTS

A. The Administration, in conjunction with the City's Sustainability Director, has identified four projects that would fit within the City's goal of maintaining leadership on environmental issues for a total of **$295,000**:

1. **$10,000 –** Blackstone Project (to match a $50,000 grant)

   The "Blackstone Project" is a climate change education project. Salt Lake City is one of 10 cities participating in providing matching funds. The goal is to fund a comprehensive public engagement campaign. If all 10 cities participate, the total would be $150,000. Other cities participating include Seattle, Austin, Boston, Albuquerque, Cleveland, Minneapolis, Milwaukee, and Portland.

2. **$25,000 –** Model Sustainable Code Project (Phase I)

   The City will be undertaking, with the assistance of a consultant, a comprehensive model sustainable code. The overall goal is to identify key areas of current City plans, policies, and regulations and identify where they can be altered or improved with a focus on key sustainability topics (food security, energy conservation, building standards, transportation, air quality, recycling, open space, water conservation, etc). In Phase I, the consultant will provide a report summarizing goals for each area listed above. The timeframe is approximately 90 days. *Phases II and III ($35,000 and $40,000 respectively), will be completed in FY 2009 (the timeframe identified is 9 months). Phase II will compare goals identified in Phase I with current development codes, and suggest specific areas for amendments to be made to encourage and enhance the City's sustainability efforts (national best practices will be discussed). Phase III will involve preparation of priority amendments to all applicable City ordinances to insert sustainability provisions. The Administration is proposing to fund these Phases out of the remainder of the*

"Energy Fund for the Future" that is proposed to be rolled over in the annual budget process (See Key Element #B).

The next two items are both related to the Energy Performance Audit Contract process. The Council may wish to request a full briefing from the Administration regarding Energy Performance Contracts in general, as the issues involved can be fairly complex. *The Council may wish to defer action on these items until after a full briefing, or appropriate funds for the audit with a request that the Administration brief the Council on Energy Performance Contracts at a later date.* There have been questions raised in the past about the benefits of an Energy Performance Contract in general, and whether the City could identify and make these changes without an Energy Service Company (ESCO). As the Council ultimately the budgeting authority for the City, it may wish to ask the Administration to clarify the financing methodology (ESCO interest rate vs. City Sales Tax Bond Rate).

3. $210,000 – Investment-Grade Energy Performance Audit (General Fund Portion)
   - **Background** - Last year the City Administration began the process of issuing an RFP for an Energy Service Company (ESCO) to first audit to identify and then *possibly* finance future energy efficiency projects for City-owned and operated facilities. The general idea of an ESCO contract is that the ESCO would determine the total cost savings generated by needed energy efficiency projects over their useful life. The City would then use this company to finance the up-front cost of these improvements with the identified savings as the re-payment source. The ESCO would serve as both the financing mechanism for the City, as well as the contractor and monitor (to track actual energy savings). It is possible that the ESCO would sub-contract some of these duties.
   - **Process** - Two out of Four proposals reviewed have been identified as finalists. These two finalists are invited to perform "Investment Grade Audits" of City facilities. This is what the $210,000 request will pay for. The Audits would provide information detailed enough to finance the Energy improvements, should the City decide to pursue this option. This money would only be spent if the City decided not to pursue the recommended improvements WITH the ESCO. If the City decided to finance the improvements with the ESCO, then the cost of the audit would be rolled into the overall financing.
   - **Cost –** the breakdown of audit costs for City facilities are as follows:

Fund	Square Feet	Cost*
General Fund	1,727,800	$ 207,336
Airport	552,000	$ 66,240
Public Utilities	88,200	$ 10,584
Total	**2,368,000**	**$ 284,160**
**costs are estimated at $0.12/square foot*		

   - After learning that the City was far along in the process of securing an ESCO contract, the County has indicated that they would like to partner with the City in their contract. The County benefits by reducing the length of time needed for them to issue their own RFP. The City benefits from the inclusion of key County staff, who have had experience dealing with ESCOs before. It is possible that the City also stands to benefit in the end, if both the County and City elect to pursue an ESCO for financing, as there may be cost efficiencies in considering all City and County facilities in the same project. The Administrative committee reviewing ESCO proposals recommends that the City partner with the County. **The Council may wish to give the Administration policy direction on this matter, or request further information about partnering with the County (if the City partners at the audit stage, is it committing to the financing stage, etc).**

4. $50,000 – Third Party Audit and Verification of ESCO contract
   As the strategy for energy efficiency project financing with an ESCO described in #3 involves a large financial investment, the City retained a consultant to assist with the RFP process. This is becoming a common practice for municipalities and entities pursuing this idea. This consultant advised members of the Administration with best practices and potential pitfalls of these types of agreements, as learned by experiences of other entities that have pursued ESCOs. One of the key lessons learned was having an independent verification of a "baseline" of energy use and energy rates to establish an agreed upon, unbiased comparison with which to judge true savings. This third party would also independently review the ESCO's monitoring systems to ensure that the City is protected.

B. The City's Administration has requested as a part of the annual budget, that the Council roll over the remaining $205,000 in the Energy Fund for the Future, to next year's annual budget. If the Council does not agree to re-appropriate these funds, they will lapse to general fund balance.

DRAFT Council Briefing: Energy Program Financing

Salt Lake City has many opportunities to reduce energy use, increase building efficiencies, and utilize alternative energy sources in the future. This briefing will discuss the alternatives available to the City to finance and manage these energy projects.

Background – Current Situation

Salt Lake City currently spends in excess of $10 million annually on utility bills and fuel. For the past several years, as fuel and utility costs have risen, Salt Lake City has been in the process of making energy efficiency improvements. In order to step up those activities and be more responsive to the Mayor's energy conservation goals and initiatives, the department of Public Services hired a full-time Energy Coordinator during the FY '06-'07 budget process.

Since that time, the Facilities Energy Efficiency Projects Coordinator, (Energy Coordinator) has worked with Rocky Mountain Power to conduct 3 investment grade energy audits. An investment grade energy audit is a process where a comprehensive review of all City operations that use energy is completed, potential efficiencies are identified, and the resulting energy savings from these upgrades is determined. The audits have been performed on the City and County building, Plaza 349 and the West-side Senior Citizens' Center. As a result of the audits, the Salt Lake City Council appropriated approximately $425,000 in December 2006 to implement energy conservation improvements within those structures. Rocky Mountain Power's engineering firm's initial incremental cost estimates were underestimated, and with the rising costs of construction, the projects required an additional appropriation of $607,688 that is before the Council in the 2008 CIP request.

Although Rocky Mountain Power has performed these audits for the City in the past, they do not have the resources available to address the entire inventory of City facilities. Their program only targets facilities that are larger than 20,000 square feet. When the Energy Coordinator asked Rocky Mountain Power to conduct additional audits for the City portfolio, they said it would take them approximately 6 years to complete them due to the potential scope and magnitude of the City's projects. In addition, the Energy Coordinator has worked with a Mechanical/Electrical Engineering consulting firm as well as the City Engineering Staff to fully design the energy measures and has guided these projects to the contract phase. With the funding that has already been provided, these projects will be constructed in the near future with a reduced number of energy measures. Approval of the 2008 CIP funding will facilitate all the remaining Energy measures to be implemented.

In addition, the Facilities Division, with the Energy Coordinator, has aggressively attacked maintenance activities and removal of incandescent lighting, along with change out of existing fluorescent lights to premium high efficient lighting, resulting in doubling the percentage of reduced energy over previous years.

The Salt Lake City Department of Airports and Public Utilities Department also consider energy efficiency opportunities in each budget cycle to help manage energy costs.

Due to budget constraints, the City has not implemented a consistent, City-wide program to aggressively manage energy costs through addressing these needs in an aging infrastructure. As a result, it appears the City is losing significant amounts of money that could be recaptured if the City implemented a comprehensive program to systematically assess equipment and facilities, establish energy consumption baselines that can be monitored, and address the energy-draining, aging infrastructure needs of the City.

In all situations, it is always necessary to consider staying with a "business as usual" option. However, in the case of energy issues, that choice would severely limit our potential to complete energy projects in an aggressive manner. The City has stepped up the pace of performing energy initiatives and achieving saving and is doing more now than at any time in the past with the addition of the Energy Coordinator. Continuing with this approach will continue to achieve energy reductions and positive environmental impacts as long as funding can be allocated to identified projects.

Best practices for managing energy conservation and efficiency indicate facilities and equipment should be evaluated on a regular, ongoing basis to ensure maximum efficiency is being maintained. This is and would continue to be part of the Energy Coordinator responsibilities going forward. The State of Utah has implemented an aggressive energy management regime which is being further enhanced due to Governor Huntsman's Energy Efficiency Policy to improve energy efficiency by 20% by year 2015.

Alternatives/ Analysis

There are several alternatives the City could implement in order to aggressively manage energy costs and recover savings for the City. The first two options address mechanical systems and facilities. Option #1 is to create a fund whose use would be limited to energy projects. Option #2 is to outsource the solution and hire an Energy Performance Contracting Company, or ESCO, that will conduct energy efficiency audits and put together financing options to fund the capital improvements necessary to realize the energy savings and manage construction of the projects. Option #3 can be used alone or in addition to the other options, where a Behavioralist is hired to address human behaviors, review building operating parameters, establish energy consumption baselines and systematically identify additional projects worthy of future analysis.

Option #1) Create a fund to finance City energy projects: A fund for energy projects would be used for a variety of purposes including energy efficiency projects, alternative energy sources, and the purchase of "green" power. Some of these funds could also be used to hire outside expertise to assist with these projects. The availability of an energy fund would allow the City to complete self-directed assessment/construction projects, allowing the City to maintain control and fiscal oversight of the financing costs and construction schedules/costs. Funds would be used for equipment upgrades, and to hire outside consultants to augment and supplement City resources. Even with internal expertise, specialists would be needed due to the complexity and breadth of potential projects.

Additional uses of the fund would include alternative energy investments, such as solar and wind power at new and refurbished facilities. Other innovative energy projects could be implemented,

such as the waste heat from sewer project recently completed at the Lear property. There would also be the potential to create a loan program for citizens and businesses so that they would have the needed initial funding to invest in energy efficiency projects. Either a new loan program could be established, or it might be possible to integrate this with our existing small business revolving loan fund.

The energy cost savings from projects that reduce energy use would come back to the fund, making much of it a revolving fund that would be used to continually create energy efficiencies. Overall, a program like this is a good policy for any organization.

The disadvantages of such a fund, when compared to the next option, are that there still would be a limited amount of money for energy projects. Additionally, Salt Lake City would have to manage each project internally, which would be difficult to do in an aggressive manner with our present staffing levels. Construction costs are rising at an alarming rate, and our current contracting and procurement system will also limit our capacity for projects.

Option #2) Hire an ESCO: An Energy Performance Contracting Companies (ESCO) is a firm that will perform an investment grade energy assessment that could be used to secure financing for significant capital & equipment replacement projects. An ESCO will perform an assessment without any up-front money if the City agrees to implement the projects and use the money from energy savings to finance the projects and cover the costs of the assessment. ESCOs have engineers that specialize in all forms of energy conservation, including lighting, boilers, windows, pump systems, air conditioning, chillers, and more.

In addition, ESCOs provide energy savings "guarantees**"** as part of their proposals. In other words, if the City implements their recommendations, they will guarantee the energy savings they calculated in order to service the debt for the improvements they recommended. Under their contracts, if we do not receive the energy savings they guarantee, the ESCO will cover the shortfall.

Municipalities typically finance Performance Contracts utilizing tax-exempt lease purchase financing. This financing tool allows the city to match the annual savings to the annual debt service of the project, thus producing a budget neutral project. The lease purchase is really an installment purchase contract, where the city is building equity with each payment and the total cost is fully amortized over the lease term so that the city has full ownership of the asset at the end of the lease. Title to the equipment vests with the city during the lease term, and the Lessor takes a security interest in that equipment until termination of the lease.

During the term of the financing, the city is responsible for maintaining the equipment, carrying adequate insurance and paying any applicable taxes. The interest rate for these projects utilizing a lease-purchase arrangement, in today's market, typically ranges from 4 – 6%, depending upon the overall credit of the city, the size of the project, the amount of savings generated and the term of the financing.

The major benefit of an ESCO is that all energy projects are considered at once, so longer-term payback projects can be balanced with shorter-term payback projects. The ESCO's engineers also may see potential projects we do not have the expertise to implement. The main

disadvantage is that the City will either need to contract to implement the recommendations outlined by the ESCO, or pay for the City-wide assessment. Estimates for the assessment run approximately six cents a square foot for traditional buildings. The Energy Coordinator has estimated that Salt Lake City currently has approximately 7,900,000 square feet of traditional building space which would equate to approximately $474,000 for the assessment.

However the City has the ability and expertise to direct the ESCO to locations and equipment based on age of the assets and current energy usage, minimizing the likelihood that the City would turn down audit work and incur the audit fees. It should also be reiterated that the energy cost reductions must be used during the contract period to pay off the lease that financed the equipment or infrastructure.

If the City decides on this option, the ideal approach would be to have a pilot scenario of 2-3 million dollars worth of energy initiatives that would allow the City to determine if this approach will indeed work for future energy initiatives, as well as determine if the ESCO selected will in fact be the partner envisioned.

The costs of an ESCO should be going down soon, though. The Clinton Foundation recently announced a program where they will be helping cities fund the use of ESCOs to assist them in implementing energy savings projects. In the next few months, it is estimated that ESCO fees will drop by 50%, and the cost of capital equipment should also come down due to additional economies of scale. The details of the program are being completed now, and we are following its progress closely.

One disadvantage is that, once hired, the projects are turned over to the ESCO for implementation. Even then, Salt Lake City employees would still need to oversee the projects and be able to maintain them on a long-term basis. In an interview with the State of Utah Department of Facilities and Construction Management, they made the mistake of turning a large project over to and ESCO, relying on their guarantee of energy savings, and provided no internal oversight of the project. The ESCO oversold the project, did not meet the guarantees, and was able to get out of much of their commitment by arguing the interpretation of the contract. On the other hand, the University of Utah used an ESCO and was extremely satisfied with their services, but they retained fiscal oversight and controlled the construction projects and schedule. If Salt Lake City chooses to hire an ESCO, we would need staff to be involved in all phases of the process.

There are many ways that an ESCO could approach our energy issues. Due to this, we are in the process of issuing an RFP to determine the approaches that could be used at our facilities. This will also help us to determine the potential fees for an assessment, and if we should hire an ESCO or not.

Option #3) Hire a Resource Conservation Specialist (RCS)/Behavioralist: This approach is an education-based behavioral program that focuses on changing habits and attitudes within an organization, recommending equipment operational changes, and creating a new way of thinking about the use and abuse of energy. The objective is to ensure comfort in the working environment and efficient use of the space while at the same time eliminating waste. This approach eliminates the immediate need for capital expenditures or assessment fees up-front, and

begins producing energy cost savings as the proposed actions are implemented. Typical energy cost savings run approximately 20% – 30% annually. Under this scenario the assessment and consulting fees for the services of the RCS/Behavioralist are paid for from the energy savings realized by the municipality. If no savings are realized from implementing the recommendations of the RCS/Behaviorlist, then no fees are due.

Although this option primarily focuses on behaviors, the RCS/Behaviorialist has a team that could provide additional resources and expertise to the City. The team has considerable mechanical systems experience and could identify quick payback mechanical changes in a client's systems that can be replaced and produce enough energy savings within the year to cover the upgrade costs, thus mitigating budget impacts. The City is already engaged in this kind of activity with the Energy Coordinator and other department's environmental personnel. Since this program is totally funded from savings, not commissions, additional fees, or markups on new equipment sales, a BCS/Behavioralist can add value to the finding additional opportunities of energy reductions/savings. (This City would have the control over what systems and equipment is proposed for any given site). However, with systems or aging infrastructure driving energy consumption the RCS/Behavioralist team may also have the expertise to assist the City in identifying these areas as projects worthy of further assessment. These larger projects would then need to be considered on a project by project basis for either outsourcing or handling internally. Once the specific project(s) are identified, an investment grade audit would still need to be conducted. Since the scope would be specific, rather than City-wide, Rocky Mountain Power may be able to provide the audit(s) for no additional charge.

If this approach is used it should not be in connection with an independent ESCO since the performance of saving and validation could be in dispute as to which company caused the reductions. Implementation of the RCS/Behavioralist after the ESCO program or an integrated ESCO/RCS/Behavioralist under one contract with the ESCO in the lead could alleviate this major problem area.

Summary

There are overlapping ways to use these options. Any of the three options could replace, or add to, our current energy initiatives. Option #1, the Energy Fund, could be a way to finance or cover the potential cost for audits of Option #2, the ESCO. If an ESCO is hired independently, then the Energy Fund could be used for renewable energy purchases, or for loans to businesses and residences. The RCS/Behavioralist could be hired in addition to any of the other options, but that person's actions would need to be carefully separated so that the energy benefits they find can be quantified. The decision as to which option we choose will be based on what pace we want to implement our energy projects and what additional resources we want to bring to the table to find energy cost reductions.

As you can see, there are many ways to approach the issue of energy efficiency. When the ESCO proposals are received, we will have yet more information to help us to make a decision.

COPY

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IEF ADMINISTRATIVE OFFICER

SALT LAKE CITY CORPORATION

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MAYOR

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BY

Council Transmittal

To: David Everitt, Chief of Staff

Date: 24 April 2008

From: Lyn Creswell, Chief Administrative Officer

Subj: Energy Fund for the Future

Staff Contact: Vicki Bennett, Sustainability Director, 535-6540

BUDGET IMPACT: $295,000 is needed from the Energy Fund for the Future: $10,000 for the Blackstone Project; $25,000 for Phase I of the SLC Model Sustainable Code Project; $210,000 for the General Fund portion of an investment grade audit as part of a City ESCO contract; and $50,000 for third-party audit and verification of the ESCO contract.

The City Administration will ask for a re-appropriation for Fiscal Year 2008/09 of the balance ($205,000) of the Energy Fund for the Future.

DISCUSSION: The Blackstone Project is a climate change education project with a consortium of cities. Salt Lake City is one of ten cities that are participating in a grant from the Blackstone Foundation. There are substantial "start-up" investments in human and material resources to develop a comprehensive public engagement campaign. However, the grant will cover $50,000 of the project costs. Each city is being asked to contribute $10,000 additional to participate. This is an opportunity for the City to participate with a minimal contribution, and share methods, products, and lessons learned with other leading U.S. cities.

* * *

Salt Lake City Corporation has explored a Model Sustainable Code Project and has met with a consultant regarding this project. The consultant is Chris Duerksen of Clarion Associates. Mr. Duerksen has outlined a work plan with a budget and timeline. The Administration would like to begin Phase I immediately, by amending the current Foothills Study contract with Clarion. Phase I will involve conducting initial reconnaissance of existing City plans and policies, and holding interviews with key staff and elected officials to identify City sustainability goals and priorities. The focus will be on key sustainability topics (e.g., food security, energy conservation, building standards, transportation, air quality/climate change, recycling, open space/trails/parks/forestry, water conservation/water quality). Clarion will produce a report summarizing the goals in each area. The budget for this phase is $25,000, and should be completed in a 90-day timeframe.

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Phases II and III of the Model Sustainable Code Project would be completed in fiscal year 2008-09. (The Administration will ask the Council to re-appropriate the balance of the fiscal year 2007/08 Energy Fund for the Future in fiscal year 2008/09.) Phase II ($35,000) will compare the sustainability goals identified in Phase I to existing development codes (e.g., zoning, subdivision). Specific areas will be identified where amendments are necessary to remove obstacles, create incentives, and add regulations. Where applicable, national sustainability best practices will be discussed in those areas, and recommendations will be made for amendments. Phase III ($40,000) will involve preparation of priority amendments to City ordinances to insert sustainability provisions. These two phases can be completed in a nine month timeframe.

* * *

The next initiative, requesting $210,000 from the Energy Fund for the Future, is for an investment grade energy audit of the City's facilities by an Energy Service Company (ESCO). Early in 2007, an evaluation was undertaken to determine if the City should hire an ESCO to perform an energy audit of the City's facilities. The City formed a committee made up of representatives from the various City departments. The committee used an RFP to gather information, refine project costs, and explore the most effective manner for the City to proceed to improve the energy efficiencies of its facilities. The process the selection committee undertook to evaluate the proposals is as follows:

1) Four proposals were reviewed by the selection committee and ranked to assess value versus costs, as well as innovation and expertise. One proposal was eliminated after this step of the process.

2) Reference calls were placed for the remaining three offerors to learn if customers were satisfied that the ESCO met or exceeded their expectations.

3) The three remaining offerors were asked to participate in on-site interviews, at the conclusion of which, one more offeror was eliminated.

The City is anxious to continue the process with the two remaining offerors, but will need to encumber funds in order for the ESCO(s) to conduct on-site investment grade audits of the facilities. The cost for the audits is twelve cents per square foot. The General Fund distribution equals 2,368,000 square feet of facility space and the cost could potentially be $210,000. The City may or may not incur this cost. (The Salt Lake City Airport's share is 552,000 square feet of facility space and the cost could potentially be $66,000. Public Utilities share is 88,200 square feet of facility space and the cost could potentially be $10,500. These costs, if incurred, will be paid for by each respective enterprise fund.)

If the investment grade audits are performed by the ESCO(s) and the City decides not to move forward and make the recommended upgrades to the facilities, or decides to perform the improvements itself, then the audit must be paid for. However, if the City

decides to have the ESCO(s) perform the facility upgrades, then the audit costs will be rolled into the overall project costs, and the project costs would be funded by the energy savings.

Salt Lake City began the ESCO evaluation process alone and considered implementing energy efficiency modifications to approximately 5 million square feet of facilities. As the process evolved, Salt Lake City's square footage was reduced to approximately 3 million square feet. In early 2008, Salt Lake County approached Salt Lake City to consider the feasibility of joining the City and piggy-backing on the City's ESCO review/contract process.

The County is interested in partnering with Salt Lake City for several reasons: 1) the County and the City could collaborate and benefit by increasing economies of scale, 2) the County could save six months associated with preparing and implementing its own RFP, and 3) the County could benefit from Salt Lake City's participation in the Clinton Climate initiative, which provides potential significant price discounts for certain "pilot" projects like the City's initiative.

The City would receive benefits by partnering with the County on the ESCO project: 1) the County provides an additional 10 million square feet of facilities, as well as 2) they have staff with outside experience in working with, and managing, ESCO contracts and projects.

The ESCO selection committee recommends that the City partner with the County.

If the City Council approves the funds for the investment grade audit, the City will finalize its relationship with the County and provide updates to both the Airport Authority Board and the Public Utilities Advisory Board.

* * *

The last initiative being requested for funding from the Energy Fund for the Future is the hiring of an independent third-party contractor. The contractor will ensure all baseline energy measurements are accurate and verified, help negotiate block energy rates with the utility companies to ensure the City is getting the most advantageous pricing for the energy it is using, and ensure that once the new controls and upgrades are installed the resulting measurements are accurate and consistent with the ESCO's measurements. The City has estimated the cost for the third-party audit and verification function to be approximately $50,000.

The Administration recommends that the City Council approve the appropriation of $295,000 from the Energy Fund for the Future to fund the initiatives described above.