



5.3

DEPARTMENT OF  
GENERAL SERVICES  
  
OFFICE OF THE DIRECTOR

CITY OF SACRAMENTO  
CALIFORNIA

5730 - 24TH STREET  
BUILDING FOUR  
SACRAMENTO, CA  
95822-3699

916-449-5548  
FAX 916-399-0263

DIVISIONS:

COMMUNICATIONS  
FACILITY MANAGEMENT  
FLEET MANAGEMENT  
PROCUREMENT SERVICES

April 14, 1992

City Council  
Sacramento, California

Honorable Members in Session:

**SUBJECT: CITY'S ENERGY MANAGEMENT PLAN PROJECT**

**LOCATION AND COUNCIL DISTRICT**  
City Wide



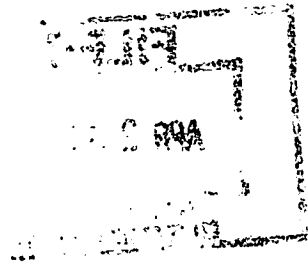
**SUMMARY**

This report presents a conceptual overview of Staff's plan to accomplish the development and implementation of an Energy Management Program that has a high level of commitment, clearly defined responsibilities, necessary authority to complete tasks, and can involve all City departments.

**STAFF RECOMMENDATION**

This report is for City Council Information only. However, its intent is for Staff to receive feedback and comments from the City Council on the process outlined herein.

That the City Council direct Staff to report back in 120 days with recommended program elements for the proposed five year Energy Management Plan and a realistic implementation plan. The program elements that will be considered at this time are as follows:



- New Construction Incentives
- Retrofits
- Audits
- Rebates
- Financing
- Consultant Services
- Resources (Additional Staff)
- Sacramento Alliance
- Energy Wheeling

#### **BACKGROUND**

In May of 1991 the Budget and Finance Committee expressed interest on the direction of the City's Energy Management Program and its view of a five year program to accelerate efforts on conservation measures.

The City of Sacramento initiated its energy management program in FY 1981-82. Since that time numerous energy efficient projects have been implemented resulting in over \$10 million of mitigated energy costs to City taxpayers. The energy management program has been primarily a single person operation staffed by the City's Energy Systems Coordinator. Other energy efficiency projects/evaluations have been conducted by Facility Management's Architectural/Engineering group.

Energy management is becoming increasingly more important due to increasing utility rates, new growth of city facilities, and the increased availability and use of energy consuming equipment and devices. At the same time, opportunities for energy management are increasing because of the introduction of new "energy efficient" devices on almost a daily basis. However this increased benefit/opportunity situation also increases the difficulty and time necessary to determine what is the most cost effective solution to a specific energy problem. It is for this reason that the City must adopt a much more comprehensive approach to energy management.

It is proposed that a Five Year Energy Management Master Plan be developed and implemented that will provide a systematic approach to addressing and resolving energy issues within the City. The energy management plan will be updated annually and incorporated into the City's CIP Program, thus enabling the Council to give adequate consideration to planned energy efficiency projects.

## **PROJECT PLAN CONCEPT OVERVIEW**

The initial action step would be to set up an Energy Management Program organization made up of City, PG&E and SMUD staff. The City team would consist of key department heads to direct the program coordination effort which would consist of staff representatives from various departments and discipline, along with PG&E and SMUD representatives (Ref. Exhibit I Organization Charts).

An overview of the function and role of the Energy Management Program Team is provided below:

### Executive Management Group

The Executive Management Group would consist of a City Councilperson, representative of the City Manager's Office, Director of General Services, Director of Utilities, PG&E representative, and a SMUD representative. The purpose of this group is to:

1. Develop and recommend operational goals and objectives that will be representative of all organizations and areas within the City;
2. Provide timely review of the Energy Management Plan and give direction to the Program Coordinator;
3. Direct their representative organizations in the implementation of efficiency measures as adopted within the master plan by the City Council; and
4. Coordinate adoption of the plan by the City Council.

### Program Coordination

Overall program management will be the responsibility of the Program Coordinator supported by a clerical position. These would be new positions funded by energy savings. Additionally, technical and advisory assistance will be provided by Program Coordination Unit team members consisting of the Facility Manager, Fleet Manager, Public Works Engineering Manager, Utility Dept. Engineering Manager, and representatives from Fire, Police, PG&E and SMUD. The primary responsibilities of Program Coordination would include:

1. Assuring directives from the Executive Management Team are communicated to the Project Development Team and integrated into the Energy Management Plan as appropriate;
2. Providing regularly scheduled status reports to the Executive Management Team for their review and action as appropriate;
3. Coordinating the completion of the draft plan as scheduled;
4. Coordinating and directing work with the Project Development Team; and
5. Day-to-day decision-making authority including project coordination and approvals.

#### Project Development Teams

As noted earlier, the Project Development Team will be divided into separate work groups, depending on their area of interest and expertise. Each work group will have similar responsibilities that will include:

1. Brainstorming to develop a list of potential energy efficiency measures;
2. Prioritizing projects and recommending an implementation schedule by:
  - a. Assessing and listing potential barriers to the implementation of potential efficiency measures;
  - b. Estimating benefits (i.e., KW, KWH, & \$ saved, environmental, etc.); and
  - c. Estimating costs and resource requirements (staffing and \$'s);
3. Estimating the nature, cost, and schedule of feasibility studies required to better assess the applicability of efficiency measures; and
4. Assessing funding alternatives described below.

The new construction work group will differ somewhat from the retrofit areas. New construction projects are already required to be constructed to an efficiency no less than that allowed by Title 24, California's Energy Efficiency Standards. Therefore the task of the new construction work group is to establish procedures and recommend guidelines that will assure the Council that all future buildings will be constructed as energy efficiently as economically possible. Use of SMUD, PG&E, and CEC rebates/grants will be maximized to improve project economics and maximize implementation of energy efficiency measures.

The next action step following the establishment of the Energy Management Program Organization would be to develop the near and long term strategies and policies for the implementation of energy efficiency measures in existing and future City owned/occupied facilities and vehicles. The plan would be a working document, and therefore be updated annually for review and adoption by the City Council. The main components of the Energy management Plan would be:

1. Recommend Energy Efficiency Goals, Objectives, and Policies that will provide guidelines and direction for evaluating and implementing conservation projects. Clearly stated goals and objectives, accompanied by Council adopted policies will enable Staff to more easily respond to and address City Council concerns. Policies will address cost effectiveness criteria, project authorities and responsibilities, guidelines/criteria for equipment purchases, guidelines for addressing efficiency in new construction projects, building and equipment leasing criteria, and fleet vehicle operations.
2. A comprehensive Five Year Implementation Strategy that will include:
  - a. Recommended efficiency projects and feasibility studies, and implementation schedules;
  - b. Estimated benefits to the City and the Sacramento community (e.g., cost and energy savings, and environmental improvements); and
  - c. Resource requirements and budget impacts (\$'s, staffing, consulting).

3. Financing Recommendations for Energy Efficiency Projects. Alternative financing methods could include a) funding from the O&M budget, b) funding through revenue bonds, c) utilization of SMUD/PG&E financing and rebates, d) CEC grants or loans, and/or e) third party financing. Third party intervention is especially applicable for high cost projects that are difficult to finance through normal budgeting procedures. Some third party energy companies will provide engineering services, finance projects, manage construction, and even manage the operation of energy projects. The incentive for energy companies to accept the risk for energy projects is that they share the utility cost savings with the host (e.g., City) for a specified amount of time.
4. Status Report of Efficiency Projects. On some projects, the completion of a feasibility study, engineering design, and construction will span the course of two or more fiscal years. The status of each project will be updated annually and included in the annual Five Year Energy Management Master Plan, thereby enabling the Council to better assess budgetary impacts and efficiency accomplishments.

#### **FINANCIAL CONSIDERATIONS**

Funding required to provide for new resources support and for contracted services would be provided by energy cost savings realized from the efficiency of projects. The energy savings could be set aside in a separate fund or account to provide financing to support the projects and staff services.

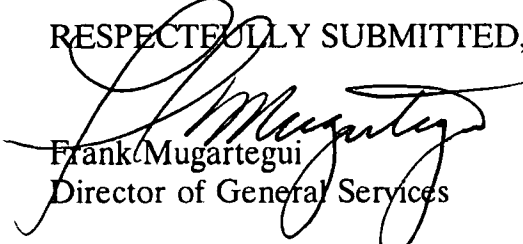
#### **POLICY CONSIDERATIONS**

The proposed program is consistent with Council direction. Council needs to provide Staff with input on our proposed concept.

#### **MBE/WBE EFFORTS**

Where applicable (i.e., utilization of consultants, etc.) staff will aggressively solicit MBE/WBE firms for their participation.


RESPECTFULLY SUBMITTED,



Frank Mugartegui  
Director of General Services

City Council  
City's Energy Management Plan Project  
Page 7

FOR COUNCIL INFORMATION



Walter J. Slipe  
City Manager

For Council Meeting dated  
April 28, 1992

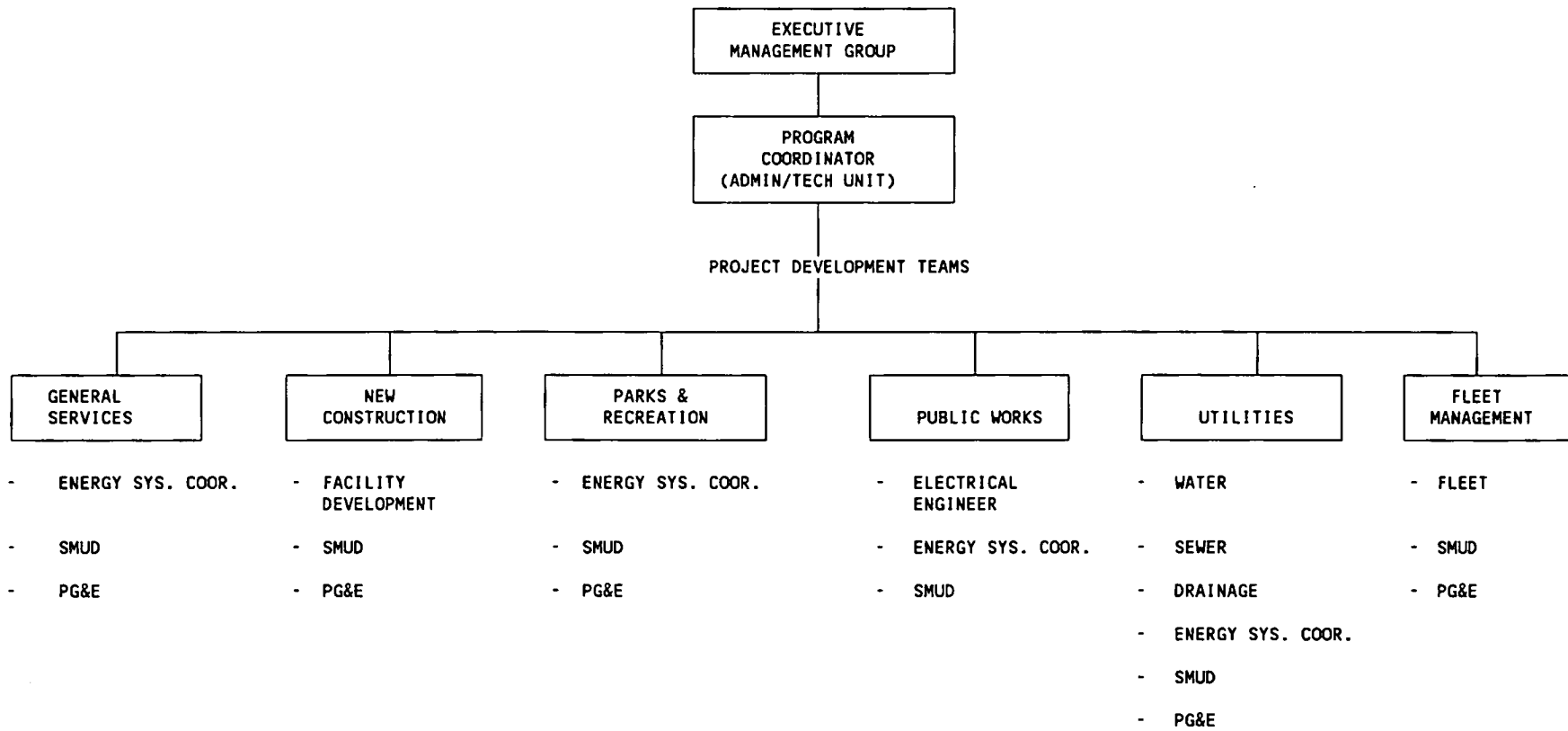
CONTACT PERSON

Frank Mugartegui, 433-6200  
GSA 92-089

cc: PG&E  
SMUD  
City Department Directors



CITY OF SACRAMENTO  
ENERGY MANAGEMENT PROGRAM TEAM



CITY OF SACRAMENTO  
 FIVE YEAR ENERGY MANAGEMENT PROGRAM ACTION PLAN

FY 1992-93

FY 1993-94

FY 1994-95

FY 1995-96

FY 1996-97

PROJECT TEAM

- Executive Management Group - City Management, PG&E & SMUD Rep
- Program Coordinator - City Staff, PG&E & SMUD Rep
- Project Teams - City Activities Representatives, Consultants, PG&E & SMUD Reps

PROGRAM ELEMENTS

- New Construction Incentives
- Retro Fits
- Audits
- Rebates
- Financing
- Consultant Services
- Resources (Add'l Staff)
- Sacramento Alliance
- Energy Wheeling