

# Agenda Report

DATE: June 25, 2001

TO: City Council  
THROUGH: Deregulation Committee

FROM: City Manager

SUBJECT: Summer 2001 Energy Conservation Program and Energy Efficiency Retrofits for City Facilities

## **RECOMMENDATION**

It is recommended that the City Council:

1. Adopt the proposed Summer 2001 Energy Conservation Program to reduce energy consumption by 10% in all City facilities; and
2. Approve a journal voucher appropriating a total of \$586,323 to the following unfunded Capital projects for the following City facilities:
  - Community Health Center – To purchase and install an automatic building control system. Sources of funds: Health Fund - \$133,500, Public Benefits Charge Fund - \$44,500;
  - Police Building – To purchase and install an energy management system (EMS). Source of funds: Charter Capital Fund - \$135,242, Public Benefits Charge Fund - \$45,081; and,
  - Villa Park Center – To purchase and install an energy management system, heating, ventilating, and air conditioning system (HVAC), and swimming pool boiler. Source of funds: Charter Capital Fund - \$171,000, Public Benefits Charge Fund - \$57,000.

## **BACKGROUND**

### Summer 2001 Energy Conservation Program

California is faced with a statewide electric generation shortage. This impending energy crisis could mean frequent blackout conditions throughout the State, as a result of inadequate generation supplies. Although the City of Pasadena has adequate supplies

of generation to meet the needs of the community, we are cooperating with the California Independent System Operator to supply energy to the electric grid during Stage III emergencies. As a result, this past year, Pasadena and other communities have experienced blackouts when electric supplies have dipped below what is considered safe by the operators of the State's electrical grid. Due to the energy crisis, which could last for the next several years, it is imperative that Pasadena implements an aggressive energy conservation plan.

The City's conservation program is aimed at reducing energy consumption in all City buildings. It is the goal of the City to lead by example by promoting the spirit of energy conservation by producing measurable results through creative and innovative actions. The City's goal is to reduce energy consumption by 10% in all city facilities. The conservation program will focus on several key areas such as:

- Educating employees on how they can contribute in helping to meet or exceed the City's conservation objectives.
- Conducting energy usage assessments and/or audits of City facilities to identify areas of potential energy savings.
- Implementing energy conservation measures identified through energy audits and employee suggestions that will effectively reduce energy consumption. Please see "Attachment I" for suggested City Conservation Policy statement and energy conservation suggestions.

#### Energy Efficiency Retrofits for City Facilities

The Department of Public Works and Transportation (PW&T) is seeking ways to improve the energy efficiency of existing city facilities. The first step has included evaluating current energy use in City owned facilities. An internal review of utility bills conducted earlier this year identified the largest energy users among City buildings. The top users were identified as City Hall, Community Health Center, The Police Department, and Villa Park Center.

To help in reaching the City's energy conservation goals, the PW&T Department is recommending the installation of an energy management system (EMS) at the Community Health Center, Police Department, and Villa Park Center. City Hall was excluded due to the pending seismic renovations.

The current EMS allows the Heating and Air Conditioning units of City buildings to be controlled though the City's exchange network. Controls are installed on the existing HVAC equipment which allows air temperature to be lowered, raised, and even completely shut off via a control room located at the city yards. It also enables staff to completely and/or partially shut down non-critical areas without affecting airflow in critical areas.

Adding these buildings to the City's master EMS, as the first step of a long-term energy management strategy, will help to ensure the City will reach its 10% target both expeditiously and efficiently. The projected payback for these projects range from 2.3 years to 7.15 years with an average payback of 4 years. Completion of the installation of the EMS is projected to take from between five to six months from approval.

Energy efficiency rebates through the Pasadena Water and Power's Public Benefit Program are available to help defray a portion of the cost of installation of the retrofit projects described above. Under the customer energy efficiency rebate program, the total rebates available to the City for these projects is estimated to be \$146,581 or 25% of the total project cost.

**FISCAL IMPACT**

Sufficient funds are available in the Health Fund, Public Benefits Charge Fund and the Charter Capital Fund to support these appropriations.

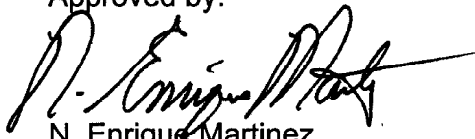
Respectfully submitted,

  
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City Manager

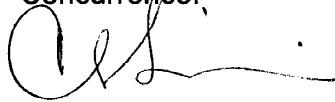
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**\*Summer 2001 Energy Conservation Program is attached**