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May 19, 2009

**ACTION UNDER PRESIDENT'S AUTHORITY – AMENDMENT OF THE BUDGET
FOR CAPITAL IMPROVEMENT AND THE CAPITAL IMPROVEMENT PROGRAM
AND APPROVAL OF EXTERNAL AND STANDBY FINANCING FOR 2009-2011
STATEWIDE ENERGY PARTNERSHIP PROGRAM, LOS ANGELES CAMPUS**

It is recommended that:

Pursuant to Standing Order 100.4(q)

- (1) The President amend the 2008-09 Budget for Capital Improvements and the Capital Improvement Program to include the following project:
 - From: Los Angeles: 2007-08 Energy Conservation Program - preliminary plans, working drawings, construction, equipment - \$4,200,000 to be funded from external financing
 - To: Los Angeles: 2009-2011 Statewide Energy Partnership Program - preliminary plans, working drawings, construction, equipment - \$4,317,750 to be funded from external financing (\$3,517,750) and incentive payments from the publicly-owned utilities (\$800,000)

(additions shown in underscore; deletions shown in strikeout)

Pursuant to Standing Order 100.4(nn)

- (2) The President be authorized to obtain external financing not to exceed \$3,517,750 ~~\$4,200,000~~ subject to the following conditions to finance the 2009-2011 Statewide Energy Partnership Program. The President requires that:
 - a. Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period;
 - b. As long as the debt is outstanding, ~~the Los Angeles campus' share of Federal Indirect cost recovery deposited to Fund 19933~~ State operating funds (as provided for under terms set forth in Provision 2 of Item 6440-001-0001 of Section 2.00 of

the 2008 Budget Act) shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing; and

- c. The general credit of the Regents shall not be pledged.
- (3) ~~Officers of The Regents be authorized to provide certification to the lender that interest paid by The Regents is excluded from gross income for purposes of federal income taxation under existing law.~~
- (4) The President be authorized to obtain standby financing not to exceed \$800,000 to finance the 2009-2011 Statewide Energy Partnership Program and subject to the following conditions:
- a. Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period;
 - b. Repayment of the standby financing shall be from energy efficiency incentive payments from Los Angeles Department of Water and Power; in the event that collection is insufficient, the debt service will be paid from State operating funds (as provided for under terms set forth in Provision 2 of Item 6440-001-0001 of Section 2.00 of the 2008 Budget Act), shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing; and
 - c. The general credit of the Regents shall not be pledged.
- (5) Officers of the Regents be authorized to execute all documents necessary in connection with the above.

(Attachments)

DESCRIPTION

The Los Angeles campus is requesting approval to change the repayment source of external financing for its energy conservation program previously approved by President Dynes from the campus' share of the Federal Indirect Cost Recovery deposited to Fund 19933 to State operating funds.

In April 2008, President Dynes approved \$4,200,000 in external financing for the Los Angeles campus' 2007-08 Energy Conservation Program with repayment from the campus' share of the Federal Indirect Cost Recovery deposited to Fund 19933. This allowed the campus to move forward with the initial portion of the campus' efforts to increase energy efficiency. In March 2009, the Regents approved the systemwide 2009-2011 Statewide Energy Partnership Program. This project is incorporated into the program scope and financing approved by the Regents for the Los Angeles campus.

Under the partnership program, the campus requests approval of \$3,517,750 in long-term financing and \$800,000 in standby financing. The standby financing will cover that portion of the project costs to be paid by the Los Angeles Department of Water and Power (LADWP) in the form of incentive payments upon completion of the project. The \$3,517,750 of long-term financing includes \$117,750 in interest during construction on both the long-term financing and the standby financing. The \$4,200,000 originally approved by President Dynes did not include interest during construction.

Program Description

This program addresses buildings constructed in the late 1950s through the 1970s that used a then common double duct air distribution system. Such systems use single, constant volume supply fans that blow air over side-by-side heating and cooling coils into separate ducts that convey warm and cold air streams. The streams are mixed at the delivery points to yield the desired temperatures. A constant volume of heating and cooling water is circulated throughout the building to condition the air. While double duct systems are reliable, they are energy inefficient because they continuously heat and cool air streams even when only heating or cooling is needed. The majority of subsystems included in this program have benefited from the campus deferred maintenance program with the installation of new cooling and heating coils, pumps, and new or refurbished fans. This previous work on the major components of these subsystems has provided the foundation to increase the systems' operating efficiency through reconfiguration of the distribution systems and modernization of control systems.

This Energy Conservation Program would modify each double duct air system to allow the amount of air supplied and exhausted to be regulated in accordance with building occupancy and outdoor air conditions. The air flow controls would be modified to allow only heated or cooled air, rather than a blend, to be supplied. Carbon Dioxide (CO₂) sensing would be added to monitor occupancy and highly reliable campus weather stations would be added to monitor outside air conditions. Controls would be modernized to permit the use of sophisticated control algorithms to regulate system performance. Hot and cold water systems in each building would

be converted to enable flows to vary based on needs driven by occupancy and outside atmospheric conditions.

Policy on Sustainable Practices

This Energy Conservation Program would comply with the *University of California Policy on Sustainable Practices*, and applicable policies for construction and maintenance. As required by this policy, the project would adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

Environmental Classification

In accordance with the California Environmental Quality Act (CEQA) and the University Guidelines for Implementation of CEQA, as amended, the proposed program is Categorically Exempt Class 1 Existing Facilities.

Financial Feasibility

The total cost of this portion of the Los Angeles campus 2009-2011 Statewide Energy Partnership Program to be repaid with State-operating funds would be \$4,317,750 (including capitalized interest), funded from external financing (\$3,517,750) and incentive payments from the Los Angeles Department of Water and Power (\$800,000).

Based on long-term debt of \$3,517,750 over 15 years at 5.75 percent interest, the annual debt service is estimated at \$356,304. Approximately \$1,000,000 in annual energy savings are expected from this first phase of the program. As long as the debt is outstanding, State operating funds (as provided for under terms set forth in Provision 2 of Item 6440-001-0001 of Section 2.00 of the 2008 Budget Act), shall be maintained in amounts sufficient to pay the debt service to meet the related requirements of the authorized financing.

The financing for this project is included in the Los Angeles portion of the 2009-2011 Statewide Energy Partnership Program that was approved by the Regents in March 2009.

The external financing would be paid from revenue sources identified in the external financing documents; therefore, the general credit of the Regents would not be pledged.

Approved by:


Mark G. Yudof
President of the University


Date

ATTACHMENT 1

SUMMARY FINANCIAL FEASIBILITY ANALYSIS

Project Title:

2009-2011 Statewide Energy Partnership Program

Total Estimated Program Cost:

\$ 4,317,750

Proposed Source(s) of Funding:

External Financing	\$ 3,517,750
Standby Financing	\$ 800,000

Proposed Financing Terms:

External Financing Interest Rate: 5.75%	Duration: 15 Years
Standby Financing Interest Rate: 5.00%	Duration: 6 months

Pledged Source of Repayment:

State Operating Funds (Annual Purchased Utilities Budget)	\$ 445,500
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Estimated Annual Expense:

Projected Annual Debt Service (proposed project)	\$ 356,304
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Debt Service Coverage:

1.25x