## THE UNIVERSITY OF MICHIGAN REGENTS COMMUNICATION

## **ACTION REQUEST**

Subject:

Central Power Plant

Two Replacement Steam Turbines

Action

Requested:

Approval to Proceed with Project

## Background:

The Central Power Plant (CPP) provides electrical power to the Central and Medical campus through purchased electricity and on-site generation of electricity. Steam is produced in the CPP boilers and routed through steam turbines connected to electric generators. This co-generation allows for a very efficient operation and the University received an award from the US Environmental Protection Agency (EPA) in 2002 recognizing the efficient operation of the CPP. Steam turbines have a normal life expectancy of thirty years with regular five-year major maintenance overhaul and minor yearly maintenance. The existing steam turbines are thirty years old and need to be replaced. This project will replace two of the three steam turbines with updated technology steam turbines that will operate more efficiently and produce greater amounts of electricity with the same amount of energy. The new steam turbines are estimated to reduce purchased energy by \$670,000 per year and reduce carbon dioxide emissions by 1,000 tons per year. There will be no impact on parking from this project.

The estimated cost of the project is \$4,200,000. Funding will be provided from Utility Resources. The construction cash flow may be provided, all or in part, by increasing the commercial paper issuance under the commercial paper program, secured by a pledge of General Revenues, and authorized by the Regents. The University of Michigan, Plant Extension – Architecture, Engineering and will design the project. The installation of both turbines will be completed in Spring 2006.

We recommend that the Regents approve the Central Power Plant – Two Replacement Steam Turbines project as described, and authorize issuing the project for bids and awarding construction contracts providing that bids are within the approved budget.

Respectfully submitted,

Timothy P. Slottow

Executive Vice President and

Chief Financial Officer

February 2005

APPROVED BY THE REGENTS ON