THE UNIVERSITY OF MICHIGAN
REGENTS COMMUNICATION

ACTION REQUEST

Subject: Harlan Hatcher Graduate Library
Central Chiller Plant and Substation Replacement

Action Requested: Approval to Proceed with Project

Background:

The existing chillers at the Hatcher Graduate Library are thirty and thirty-five years old and need to be replaced. A typical chiller is expected to last twenty to twenty-five years. Several other individual chillers in the immediate area, including Clements Library, the President’s Residence, Tappan Hall, and Alumni Memorial Hall were installed in either the 1970s or 1980s and are scheduled for replacement in the near future. In addition, the Alumni Memorial Hall Museum of Art Addition and Renovation Project will require additional chiller capacity. Therefore, we are proposing consolidating the chillers into a single chiller plant that will provide greater operational efficiency and ease of maintenance. Concurrently we will upgrade the electrical substation at the facility from 2.4 kilovolts (kV) to the University’s standard 13.2 kV system.

The project will remove the existing chillers and associated components, then install an appropriate waterproof barrier on the floor of the penthouse that is not currently in place. In addition, leak detection devices and appropriate overflows will be installed to mitigate the impact of any potential releases of water from the system and provide a greater level of protection for the entire building. Two energy efficient chillers will be installed, allowing for diversification of loads and maximum overall efficiency. The existing cooling towers will also be replaced. The project will include site utilities and all architectural, mechanical and electrical work necessary to accomplish these improvements. There will be no permanent impact on parking from this project.

The estimated cost of the project is $6,800,000. Funding will be provided from Utility and General Fund 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 engineering firm of DiClemente Siegel Design Inc. will design the chiller project, and the University of Michigan, Plant Extension – Architecture, Engineering and Construction will design the substation project. Construction is scheduled to be completed in Summer 2006.

We recommend that the Regents approve the Harlan Hatcher Graduate Library – Central Chiller Plant and Substation Replacement 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