

**ADVISORY INFORMATION**

Date Prepared: March 3, 2008

Subject: Authorization to Use Xcel Energy Rebate Funds to Support Algae Research

Proposed Action:

That the Metropolitan Council authorize its Regional Administrator to use MCES capital revolving funds (generated from energy rebates for MCES conservation efforts) to fund algae-to-energy related research, up to \$250,000 for out of pocket expenses and further to authorize staff time and use of Council facilities to further this research.

Summary of Committee Discussion / Questions:

Council member Susag commented that using energy rebate dollars for energy research is a good linkage.

Chair Leppik asked if the rebates are in any restricted in their use. Staff responded that there are no restrictions from Xcel or State Statutes, but that Council policy restricts their use to wastewater uses.

Council member Wittsack asked if there is any grant money remaining. Staff responded that the remaining MetroEnvironment Program grant money has been committed to the Foundation Drain Grant program.

Council member Wolter asked about the disbursement of funds; staff responded that plans are not finalized, but funds could be distributed to the U of M or used for Council expenses on this research.

Chair Leppik asked about research that is going on in other places in the country. Staff responded that the Department of Energy is re-starting a program this year that it had ended in the late 90s, and there are a number of universities that are pursuing the concept of algae to energy. Staff also noted that in addition to the universities, there are three or four entrepreneurial firms with venture capital behind them that are also pursuing algae as a renewable fuel. It isn't known if any are pursuing growing the algae on wastewater. Our research has potentially a triple benefit – the renewable fuel, pollution reduction in effluent, and the carbon dioxide (air emissions) neutrality.

Motion to accept proposed action was made, seconded, and passed. Councilmember Wolter did not cast a vote, as he was out of the room.

E Environment Committee

Business Item

Item: 2008 – 58

Meeting date: February 26, 2008

For the Metropolitan Council Meeting of March 12, 2008

ADVISORY INFORMATION

Date:	February 20, 2008
Subject:	Authorization to Use Xcel Energy Rebate Funds to Support Algae Research
District(s), Member(s):	All
Policy/Legal Reference:	Council Policy 3 / M.S. 473.517
Staff Prepared/Presented:	Jason Willett 651-602-1196; Bob Polta 651-602-8390
Division/Department:	MCES c/o William Moore 651-602-1162

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Background

The Council and the University of Minnesota (“U”) have had energy research collaboration since mid-2006. The most advanced research project is the algae research which would potentially grow algae and produce a renewable fuel while at the same time reducing phosphorus and nitrogen in our effluent (or reduce other costs of removal of these pollutants). Initial research is promising. Given the state-wide or national interest, the Council, with the U, asked the state for \$990,000 of funding to research and build a demonstration facility, in late 2008. At this time, it appears that the state will not be able to fund this research or demo facility. Other funding sources are being investigated, and in fact the U recently received \$150,000 from Xcel Energy in support of this research.

At this time the research focus includes: investigating the energy yield of several algal species, use of wastewater from different areas of the wastewater treatment process, and different methods of maximizing exposure to sunlight with minimum use of power. A small scale continuous process is hoped to be built this spring. The research is not sufficiently advanced to know whether the results will warrant moving ahead with a demonstration facility or whether the U or other partners would be willing and have available funding for a portion of the demonstration facility.

Rationale

Use of Council wastewater fee revenue is restricted to the operations, maintenance and debt service of the metropolitan wastewater system, but energy rebate funds can be used for broader purposes.

Funding

Energy rebates set aside within the MCES capital revolving fund are sufficient for this expense, but their use as a fund transfer requires Council approval.

Known Support / Opposition

Representative Jean Wagenius has asked the Council to make a commitment to move this research forward.