

MEMORANDUM

To: Banking Committee

From: Board Office

Subject: Resolutions for the Sale and Award of \$13,280,000 Utility System Revenue Bonds, Series I.S.U. 2003

Date: November 3, 2003

Recommended Action:

Recommend that the Board adopt the following resolutions (see G.D. 8), subject to receipt of acceptable bids:

1. A Resolution providing for the sale and award of \$13,280,000 Utility System Revenue Bonds, Series I.S.U. 2003, and approving and authorizing the agreement of such sale and award.
 2. A Resolution authorizing and providing for the issuance of \$13,280,000 Utility System Revenue Bonds, Series I.S.U. 2003, and approving the Fourth Supplemental Indenture securing the payment thereof.
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Executive Summary:

The Banking Committee is requested to recommend that the Board adopt two resolutions related to the sale and award and issuance of \$13,280,000 Utility System Revenue Bonds, Series I.S.U. 2003.

At its October 2003 meeting, the Board authorized the Executive Director to fix the date(s) for the sale of the bonds, which would be sold to finance the Power Plant Turbine Generator #6 project.

The Board, at its January 2003 meeting, approved the project description and total budget (\$12,000,000) for the project, which will increase the electrical generating capacity of the University's power plant to serve all of the campus electrical needs.

Principal on the bonds would be repaid over a period of 20 years, with debt service of approximately \$1,020,000 annually to be paid from utility system charges and the proceeds of any utility system student fees which the Board may establish in the future.

The University's Utility System is a self-supporting operation.

Interest on the bonds would be exempt from federal and state taxes (double tax-exempt) for individuals who are Iowa residents and purchase the bonds.

Background:

Statutory
Provisions

Under the provisions of Iowa Code Chapter 262, the Board is authorized to construct, equip, maintain and operate self-liquidating and revenue producing facilities at the universities; the Board is also authorized to borrow money to construct or improve these facilities.

The sources of repayment are the income and revenues to be derived from the operation or use of the facility and from any fees or charges implemented by the Board to students for whom the facilities are made available.

Project Background

The University has purchased power from the City of Ames and Muscatine Power and Water for several years to meet the increased demand for electrical power on campus. Initially, the cost of purchasing this electricity was cheaper than the University's cost to generate the power.

However, the University reports that the cost of purchased electricity will have increased by at least 44 percent from 2000 to 2005, making it often more economical to generate electricity in the University's campus power plant than to purchase it.

The University's power plant does not currently have sufficient capacity to reliably generate the amount of electricity needed to serve all of the campus electrical needs.

Project Scope

The project, as approved by the Board in January 2003, would increase the electrical generating capacity of the power plant by replacing an existing 3 megawatt turbine generator, installed in 1948, with a new 15 megawatt turbine generator.

The University reports that this upgrade would allow the power plant to supply for several years all of the campus electrical needs.

The project would also include necessary structural, mechanical and electrical alterations to the power plant to accommodate the installation of the new generator and connection to the power plant systems.

Since this is a utility upgrade project within the confines of an existing building, the University did not need to submit information in response to the Board's capital project evaluation criteria, as approved at its June 2003 meeting, for new construction and major renovation projects.

Reimbursement
Resolution

At its September 2003 meeting, the Board adopted a resolution declaring an official intent under the above-referenced Treasury Regulation to issue debt to reimburse the Iowa State University Utility System for expenditures to be paid for the turbine generator.

Analysis:

Issue Size	<p>Components of the \$13,280,000 bond issue are estimated to include:</p> <ul style="list-style-type: none">• project costs (estimated at \$12,000,000);• debt service reserve (estimated at \$1,002,500);• bond discount (estimated at \$199,000); and• issuance costs (estimated at \$78,500).
Cost Evaluations	<p>The University's power plant is very energy efficient, but the level of efficiency is dependent upon the mix of electrical and steam energy that the campus requires.</p> <p>The University's cost analyses must therefore account for varying system efficiencies. The University's financial performance evaluations have examined both average costs of generation as well as worse case costs, with the understanding that the actual is somewhere between these two boundaries.</p> <p>The worse case for electrical generation is when there is no steam demand on campus and the turbine must operate in a condition known as straight condensing.</p> <p>The University's evaluation assumed that the fuel component of the rates would increase at an annual rate of 3 percent.</p>
Off-Site Power	<p>Based upon this assumption, the cost to purchase off-site electrical power is projected to be more than \$102 million over a 20-year period. Off-site power would be available from several new sites in Iowa, but would be constrained by delivery restrictions if improvements in transmission lines are not implemented.</p>
Self-Generated Power	<p>Exclusive of debt service, the cost to self-generate the same amount of electrical power at the ISU power plant would be somewhere between \$35 million and \$70 million dependent on the growth and stability of the demand for steam on campus.</p> <p>The \$35 million estimate assumes growth in the demand for steam will maintain the current ratio of co-generated power. The \$70 million cost assumes no additional co-generation; electrical power which is not generated as a by-product of steam generation has a higher unit cost.</p>
Internal Rate of Return	<p>The University reports that without any additional co-generation (the most conservative set of assumptions), its calculations show an internal rate of return of 14.8%, including the estimated costs of borrowing (based upon an average annual interest rate of 4.43%).</p>
Outstanding Bonds	<p>The outstanding principal of the Utility System existing bonds, as of October 1, 2003, is \$22.2 million; the last maturity is 2013.</p>

Sources of Repayment	<p>The new bonds would be issued on a parity with the outstanding bonds, with the source of repayment continuing to be utility system charges.</p> <p>As a credit enhancement, the bond covenants for the existing bonds include a provision for the Board to charge a Utility Student Fee to remedy any deficiencies in the net income of the enterprise. Since the new bonds are being issued on a parity with the existing bonds, the provision for a “backup student fee” would also apply to the new bonds.</p> <p>Since Utility System bonds were first issued in 1985, there has not been a need to charge the student fee. There is no indication that the fee would need to be charged to support the debt service on the bonds to be issued since it is anticipated that utility system charges should be more than sufficient to meet the financial requirements of the utility enterprise.</p>
Receipt of Bids	<p>The receipt and opening of bids is scheduled for 10:00 a.m. on Wednesday, November 12, 2003, and the award is scheduled for 11:30 a.m. on the same date.</p>
Resolutions	<p>Copies of the resolutions, which were prepared by Ahlers Law Firm and reviewed by Springsted, Inc., are available from the Board Office.</p>
Bond Specifics	<p>Average Maturity: 12.7 Years</p> <p>Bonds Dated: December 1, 2003</p> <p>Interest Due: May 1, 2004, and November 1 and May 1 to maturity</p> <p>Interest Exemption: Exempt from federal and state taxes for individual purchasers who are residents of Iowa</p> <p>Principal Due: November 1, 2005 – 2024</p> <p>Optional Call: Bonds maturing on or after November 1, 2014, are callable commencing November 1, 2013, and any date thereafter at par</p> <p>Denomination: \$5,000 and integral multiples thereof</p>