IOWA STATE UNIVERSITY EQUIPMENT PURCHASE

Actions Requested: Consider ratification of the Executive Director’s July 27, 2009, emergency approval for Iowa State University to replace the Meat Laboratory (ML) Refrigeration System Equipment (RSE) in the amount of $1,400,000.

Executive Summary: Equipment purchases at the Regents institutions costing more than $1 million are required by Board policy to be approved by the Board of Regents. The Executive Director may approve emergency purchases exceeding $1,000,000 to be followed by Board ratification.

Description
The nation’s premier meat science program at ISU is housed in a 54,000 square-foot facility, which is federally-inspected.

The University reports that the new RSE will have improved energy efficiency, reduced operating and maintenance expenditures, and increased system longevity and reliability.

Justification
In June 2009, the Board office approved a project to replace the ML RSE, originally installed 32 years ago in 1977. The University reports that it: (1) was designed with one central Freon receiver and compressor; and (2) fails and leaks refrigerant regularly, which require several costly and disruptive emergency repairs. An outside engineering study indicated concerns about possible failure of the equipment, which is substantially beyond its useful life. ISU is concerned that it will not operate effectively through another summer.

ISU reports that a system failure would: (1) result in an inestimable loss of faculty research samples; (2) lose product valued up to $275,000; and (3) impact more than 19 meat science courses, hundreds of thousands of dollars of research money, and a substantial number of extension and industry relationships.

The replacement refrigeration system would meet ML program requirements, be in compliance with federal inspection and food standards, and address current environmental issues associated with significant Freon loss in the current ML RSE.

To provide the least risk and disruption to the ML’s teaching, research, and extension programs, replacement would occur between November 2009 and January 2010. In order to meet that timeframe, an equipment supplier had to be selected and equipment ordered by July 31, 2009.

Known Alternatives
Republic Refrigeration Inc. (RRI) specializes in the design, installation, and maintenance of industrial refrigeration systems. ISU reports that, after several firms were considered, RRI was selected based on its experience with systems of similar type and size.

Estimated Cost and Source of Funding
The cost to the University for the refrigeration system equipment is $1,400,000. Fund sources are as follows: building repair ($350,000); overhead use of facilities ($350,000); and College of Agriculture and Life Sciences ($700,000).

Based on current costs, the University reports that payback for replacement of the ML RSE will be
approximately five years with improved reliability and reduced environmental impact.

**Board Policy:** Chapter 7.06B(12) of the Regent Policy Manual requires that:

- Equipment costing more than $1,000,000 be submitted to the Board for approval; and
- Requests submitted to the Board Office for approval must include the following information:
  - Description of the equipment;
  - Justification of the need for the equipment;
  - Any known alternatives to the equipment proposed; and
  - Estimated cost and source of funding.