SOUTH DAKOTA BOARD OF REGENTS

Committee on Budget & Finance

AGENDA ITEM: III – I

DATE: December 12-13, 2012

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SUBJECT: SDSU Frost Arena HVAC Replacement - Preliminary Facility Statement

South Dakota State University requests approval of their Preliminary Facility Statement for project development to replace the heating and ventilating equipment for Frost Arena in the Physical Education Complex at an estimated cost of $1,447,974. While the initial proposed budget for this project is below the Capital Improvement Process threshold, SDSU requests that a building committee be assigned to assist with the project and also review the professional consultant selection the Office of the State Engineer (OSE) and SDSU recommend.

The air handling systems in Frost Arena are original equipment dating back to 1973 and they have reached the end of their useful life. Of the ten air handlers serving the Arena, three have already failed and are beyond repair. The remaining units need to be replaced to prevent any additional failures. Also, the current exhaust system does not utilize energy recovery system which causes system inefficiencies.

Funding for this project will be from FY13 HEFF funds in the amount of $947,974 and FY14 HEFF funds of $500,000.

Additional project details can be found in SDSU’s attached Preliminary Facility Statement document.

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RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR

Approve SDSU’s Preliminary Facility Statement request to replace the HVAC units in Frost Arena at an estimated cost of $1,447,974. If approved, SDSU requests assignment of a building committee to assist with the project planning and implementation. Funding for this project will be $947,974 from FY13 HEFF funds and $500,000 from FY14 HEFF funds.
South Dakota State University (SDSU) requests approval of this Preliminary Facility Statement and budget for the project development.

SDSU requests the BOR to designate a building committee representative for this project. SDSU and the Office of the State Engineer have conducted a competitive selection process for a professional consultant. We request the building committee review our selection process for the firm we recommend.

The current $1,447,974 proposed budget for this project is just below the threshold where a typical Capital Improvement Process is required. The original budget would not have allowed us to fund the energy recovery portion of this project. By using FY2014 funds in addition to the FY2013 funds we are able to supplement the budget to include energy recovery in these systems. No engineering studies or estimates have been completed to date. Should the actual project costs exceed $1.5 million, SDSU would prefer not to duplicate time and efforts already committed to the project in order to comply with the Capital Improvement Process so is requesting the Building Committee at this point.

1. **General Programmatic Needs to be Addressed:**

This is primarily a maintenance replacement project of the heating and ventilating equipment located in Frost Arena portion of the Physical Education Complex. The air handling systems in Frost Arena are original equipment dating back to 1973. The units have reached the end of their useful life. Of the ten air handlers serving the Arena, three have already failed and are beyond repair. The remaining units need to be replaced before additional failures occur that would prevent us from being able to serve the programmatic needs of the space. The current exhaust system does not utilize energy recovery systems. The result is
an inefficient system that must use all new energy to heat the required ventilation air.

2. **ANALYSIS OF THE STUDENT BODY OR CONSTITUENTS TO BE SERVED:**

Frost Arena provides a venue for multiple intercollegiate sports competition and practice, sports camps, academic instruction and commencement. Student athletes, academic students, athletic fans and the community all benefit from the use of Frost Arena. Student athletes use the facility for intercollegiate sports competition and practice. Academic students use it for physical education classes and other special events such as science fairs. Sports spectators utilize the facility during sporting events. The Athletic department also conducts numerous sports camps serving area students in K-12 age bracket. The community as a whole benefits from the arena through job fairs, science fairs and the like that are hosted in Frost Arena.

3. **ADDITIONAL SERVICES TO BE OFFERED:**

The same constituents will be served by Frost Arena after completion of the project. The additional service that is planned is the incorporation of energy recovery systems in the air handling equipment in order to be good stewards of our campus resources. This will significantly reduce energy consumption within the facility. The existing systems provide heating and ventilation only. Mechanical cooling is currently not included and is not being included in this project. However, the air handling systems are intended to be designed to allow for future retrofit to make them cooling capable should the need arise before the end of the useful life of the units.

4. **COMPLIANCE WITH CAMPUS MASTER PLAN:**

No deviations from the 2025 SDSU Campus Master Plan or Athletics Master Plan are anticipated with this project. The addition of energy recovery systems will comply with the sustainability and energy efficiency goals of the Master Plan. The new air handling systems for Frost Arena will be located and designed to allow for the future building expansion and renovation in accordance with the Master Plans without impacting the equipment installed as part of this project.

5. **ANALYSIS OF NEEDS ASSESSMENT BASED ON THE FACILITIES UTILIZATION REPORT:**

Not applicable to an M&R project for HVAC system replacement.

6. **LOCATION:**
The project will occur within the existing Frost Arena and on the roof of the building above the Arena. New mechanical equipment will be located in existing mechanical rooms or in adjacent space to take advantage of utility services already in the area.

7. **REALLOCATION OF OLD SPACE, IF ANY:**

Not Applicable.

8. **PROPOSED FUNDING SOURCE/SOURCES:**

The budget for the project is $1,447,974. Funding sources for the project will be a combination of FY2013 and FY2014 HEFF M&R. The $947,974 in FY2013 funds will be utilized for design and the early stages of construction, which is expected to begin in May 2013. The $500,000 in FY2014 funds will be utilized for the remainder of construction and contract administration costs that will occur after the FY14 funds become available in July 2013.

9. **BUDGET FOR DEVELOPMENT OF A FACILITY PROGRAM PLAN:**

The Preliminary Design costs are anticipated to be approximately $40,000 for development of a Facility Program Plan should it be required.