Rec 9/27/13

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MTSU Clean Energy Initiative Project Funding Request

There are five (5) sections of the request to complete before submitting. See http://www.mtsu.edu/~sga/cleanenergy.shtml for funding guidelines. Save completed form and email to cee@mtsu.edu or mail to MTSU Box 57.

1. General Information	
Name of Person Submitting Request Ray Wiley	
Department/Office Campus Recreation	Phone # (Office) 898-5701
MTSU Box # 556	Phone # (Cell) 615-785-7805
E-mail ray.wiley@mtsu.edu	Submittal Date 9-25-2013

2. Project Categories (Select One)			
Select the category that best describes the project.			
✔	Energy Conservation/Efficiency	☐	Sustainable Design
☐	Alternative Fuels	☐	Other
☐	Renewable Energy		

3. Project Information
a. Please provide a brief descriptive title for the project. **b.** The project cost estimate is the expected cost of the project to be considered by the committee for approval, which may differ from the total project cost in the case of matching funding opportunities. **Any funding request is a 'not-to-exceed' amount. Any proposed expenditure above the requested amount will require a resubmission.** c. List the source of project cost estimates. d. Provide a brief explanation in response to question regarding previous funding.
3a. Project Title Campus Recreation Indoor Pool LED Lights
3b. Project Cost Estimate $31,450
3c. Source of Estimate Manufacturer Information and Facility Services
3d. If previous funding from this source was awarded, explain how this request differs? N/A

4. Project Description

(Completed in as much detail as possible.)

a. The scope of the work to be accomplished is a detailed description of project activities.
b. The benefit statement describes the advantages of the project as relates to the selected project category.
c. The location of the project includes the name of the building, department, and/or specific location of where the project will be conducted on campus.
d. List any departments you anticipate to be involved. Were any departments consulted in preparation of this request? Who? A listing may be attached to this form when submitted.
e. Provide specific information on anticipated student involvement or benefit.
f. Provide information for anticipated future operating and/or maintenance requirements occurring as a result of the proposed project.
g. Provide any additional comments or information that may be pertinent to approval of the project funding request.

4a. Scope: Work to be accomplished

Scope of work is to remove and replace twelve 400-watt metal halide lighting fixtures (two bulbs per fixture) located in the indoor pool at Campus Recreation with twelve 400-watt LED fixtures (one bulb per fixture) and lamps. Metal halide lamps and ballasts are to be recycled. Additionally, 9 fixtures (18 bulbs) located on the sides of the walls at Campus Recreation will be replaced due to the efficiency gained with the LED lights.

4b. Scope: Benefit Statement

The benefit of this project includes savings on electrical consumption by the elimination of the 18 bulb lights located around the sides of the indoor pool. Additionally, the electrical consumption of the LEDs will be significantly less each year (See below for exact electrical consumption savings).

With an anticipated life cycle of 10 years, these fixtures will produce a savings from replacement cost of lamps, ballast replacement, recycling costs, utility cost savings, lift rental costs, and hours of electrician labor costs.

4. Project Description (continued)

4c. Location of Project (Building, etc.)
The location will be Campus Recreation indoor pool.

4d. Participants and Roles
Manufacturer of lamps and fixtures and facility services personnel.

4e. Student participation and/or student benefit
Improved lighting for our student lifeguard staff while on duty. IE: Currently, lifeguard staff are challenged to see all participants clearly at the bottom of 13 ft. This new technology will allow significant improvement in visibility. Improved lighting for all participants of Campus Recreation aquatic programs.

4f. Future Operating and/or Maintenance Requirements
Replace lamps at the end of life cycle (est. 10 years).

4g. Additional Comments or Information Pertinent to the Proposed Project
This project will provide the improved lighting needed for additional safety for our lifeguards while they are watching patrons swim. The cost savings will be significant as we convert the old lamps and ballasts with the new LED product.

5. Project Performance Information

Provide information if applicable.

a. Provide information on estimated annual energy savings stated in units such as kW, kWh, Btu, gallons, etc.
b. Provide information on estimated annual energy cost savings in monetary terms.
c. Provide information on any annual operating or other cost savings in monetary terms. Be specific.
d. Provide information about any matching or supplementary funding opportunities that are available. Identify all sources and explain.

5a. Estimated Annual Energy Savings (Estimated in kW, kWh, Btu, etc.)

Halide: 12 fixtures * 2 bulbs * 400 W * 12 hrs/day * 344 days /1000=39,628.80 kWh/year
LED: 12 fixtures * 1 bulb * 400 W * 12 hrs/day * 344 days /1000 = 19,817.40 kWh/year
19,814.40 kWh energy savings per year.

5b. Annual Energy COST Savings ($)

$2,358.85 Savings in cost per year.

5c. Annual Operating or Other Cost Savings. Specify. ($)

480 per fixture to replace * 12 fixtures * 5 years = $28,800 in savings
$5,760 in savings per year

5d.Matching or Supplementary Funding (Identify and Explain)