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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
Terri Carlton

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Construction/Renovation Services

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Submittal Date: 2-15-2017

2. Project Categories (Select One)

Select the category that best describes the project.

X	Energy Conservation/Efficiency		Sustainable Design
	Alternative Fuels		Other
	Renewable Energy		

3. Project Information

- Please provide a brief descriptive title for the project.
- 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.**
- List the source of project cost estimates.
- Provide a brief explanation in response to question regarding previous funding.

3a. Project Title: Todd 117 – Halogen lamp replacement with L.E.D.s

3b. Project Cost Estimate: \$12,288.00

3c. Source of Estimate: Electrician's quote.

3d. If previous funding from this source was awarded, explain how this request differs? No previous funding was awarded from this source.

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

The existing halogen track lighting heads will be replaced with new heads that accept LED lamps. The existing track, circuitry, and switches will be retained.

Due to the lower voltage required for LED lamps, additional heads can be installed on each track. This will accomplish the additional lighting necessary for the drawing classes. Thirty-two new fixtures will be installed in each room for a total of 64.

4b. Scope: Benefit Statement

Students who attend classes in this room are continually working with dim light due to the frequent burn-out of the halogen lamps. The new LED fixtures will provide long-lasting light at a fraction of the energy usage of the halogen lamps. Continuous halogen lamp replacement will no longer be necessary. The lamps will be cooler to the touch and lessen the heat-load in the room.

4. Project Description (continued)

4c. Location of Project (Building, etc.)

Todd Hall; Drawing Room 117 and 117A

4d. Participants and Roles

Construction/Renovation Services will contract with local electrician to install the new fixtures and lamps. Work will be coordinated with the Art Department's classes and events.

4e. Student participation and/or student benefit

Students will benefit by having enough reliable lighting for their classes and will not be required to work in a poorly lit environment.

4f. Future Operating and/or Maintenance Requirements

Monitoring of the LEDs for burn-out during routine re-lamping efforts.

4g. Additional Comments or Information Pertinent to the Proposed Project

The Art Department requested this change in the past as part of a small renovation project. Funding was never secured, but the need for change is still important.

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.)

Estimated savings is 123 kW per year per lamp or a total of 7,872 kW.

5b. Annual Energy COST Savings (\$)

Estimated savings is 12.28 per lamp or a total of 785.92 for all 64 fixtures per year.

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

Continual lamp changing will be eliminated which will cut labor and material operating costs by approximately \$560/year.

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

No matching funding opportunities are available.