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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](mailto:cee@mtsu.edu) or mail to MTSU Box 57.

<b>1. General Information</b>	
Name of Person Submitting Request Justin B Durham	
Department/Office Theater & Dance	Phone # (Office) 898-2181
MTSU Box # <b>43</b>	Phone # (Cell) 615-613-6325
E-mail <a href="mailto:justin.durham@mtsu.edu">justin.durham@mtsu.edu</a>	Submittal Date 2/20/15

<b>2. Project Categories (Select One)</b>	
Select the category that best describes the project.	
<input checked="" type="checkbox"/> Energy Conservation/Efficiency	<input type="checkbox"/> Sustainable Design
<input type="checkbox"/> Alternative Fuels	<input type="checkbox"/> Other
<input type="checkbox"/> Renewable Energy	

<b>3. Project Information</b>
<p>a. Please provide a brief descriptive title for the project.</p> <p>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. <b>Any funding request is a 'not-to-exceed' amount. Any proposed expenditure above the requested amount will require a resubmission.</b></p> <p>c. List the source of project cost estimates.</p> <p>d. Provide a brief explanation in response to question regarding previous funding.</p>
3a. Project Title BDA Evergy Conservation Project
3b. Project Cost Estimate <b>\$4,567.60</b>
3c. Source of Estimate <b>Maufacturer Information and Facility Services</b>
3d. If previous funding from this source was awarded, explain how this request differs? <b>N/A</b>

**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 install (9) motion sensors in the hallways of the Boutwell Dramatic Arts building and connect them to the overhead lighting in the hallways, which currently remain on for 24 hours each day.

**4b. Scope: Benefit Statement**

The benefit of this project includes savings on electrical consumption by reducing the total amount of time each of the (170) bulbs are illuminated by 67%. This will cut back on wasteful usage of electricity during off-hours. Additionally, bulb lifespan will be increased due to the reduced usage resulting in savings for bulb replacement.

<b>4. Project Description (continued)</b>
4c. Location of Project (Building, etc.) Boutwell Dramtic Arts Building (BDA)
4d. Participants and Roles Many opportunities for collaborative work in electral installation.
4e. Student participation and/or student benefit Lower operation costs increase in awarenëss and security, lighting being a signal of movement.
4f. Future Operating and/or Maintenance Requirements N/A
4g. Additional Comments or Information Pertinent to the Proposed Project N/A

### 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.)

Currently:  $2 \text{ bulbs} * 85 \text{ fixtures} * 32\text{W} * 24\text{hrs/day} * 344 \text{ days} / 1000 = 44,912.64 \text{ kWh/year}$   
 Motion Sensors:  $2 \text{ bulbs} * 85 \text{ fixtures} * 32\text{W} * 16\text{hrs/day} * 344 \text{ days} / 1000 = 29,941.76 \text{ kWh/year}$

Energy savings of 14,970.88 kWh/year

#### 5b. Annual Energy COST Savings (\$)

Approx. annual savings of \$1,782.24

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

With motion sensors, bulbs last 67% longer increasing life expectancy from 3.42 years to 5.14 years. 10-year bulb replacement savings of \$292.50

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

N/A