

Rec  
9/26/22

22

## 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.

1. General Information	
Name of Person Submitting Request Ben Lynch	
Department/Office 32	Phone # (Office) 2118
MTSU Box # 32	Phone # (Cell) 615-278-0252
E-mail <a href="mailto:blynch@mtsu.edu">blynch@mtsu.edu</a>	Submittal Date 9/26/2022

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

3. Project Information
<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 Electric Energy Resource Management Solution
3b. Project Cost Estimate \$18,125
3c. Source of Estimate Scalene-Software.com

3d. If previous funding from this source was awarded, explain how this request differs?

#### **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**

Integrate the existing MTSU electrical infrastructure into a common platform for monitoring energy usage by collecting electrical data and presenting actionable insights. Facility Vision software will be installed on-premises to gather and present this information.

#### 4b. Scope: Benefit Statement

The Facility Vision software platform is designed to be data and hardware agnostic allowing for the collection of relevant energy data from various sources. It's modular design and customizable data organization can provide a central repository for campus-wide usage across all utility types. The available analytics will unlock insights on usage patterns for electrical equipment including switchgear, transformers, and buildings. The automated reporting and SMS alarm notifications will help ensure important energy events are visible to the relevant parties on campus.

<b>4. Project Description (continued)</b>
4c. Location of Project (Building, etc.) Campus Wide
4d. Participants and Roles  Ben Lynch - Facilities Service - IT  Alan Parker - Director of Engineering Services  Jeff McConnell - Director of Energy Services  Joe Whitefield - AVP, Facilities Services
4e. Student participation and/or student benefit  A read only dashboard will allow teachers to utilize real world examples of Electrical Single Line diagrams, power utilization summaries and electrical trends.
4f. Future Operating and/or Maintenance Requirements
4g. Additional Comments or Information Pertinent to the Proposed Project

**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.)** Energy Savings will be based on insights that are available to engineering & operations. Some areas of savings include:

- 1) Notification as demand approaches previously established peaks allowing operations to take mitigation action if warranted.
- 2) Notification of unusual usage allowing operations or maintenance to address issues in real-time.
- 3) Weather normalized usage patterns to help guide scheduling of equipment maintenance
- 4) Provides engineering with historical usage to facilitate available capacity studies
- 5) Equipment efficiency and Cost per Unit of Energy reports (dependent on available metering) to help maximize operational efficiency
- 6) Allows energy impact studies to be based on empirical usage data instead of theoretical savings.
- 7) Saves staff time gathering and processing energy data into useful reports, allowing them to perform more value-add functions

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

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

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