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## MTSU Clean Energy Initiative Project Funding Request

There are five (5) sections of the request to complete before submitting.

1. General Information	
Name of Person Submitting Request Jeff McConnell	
Department/Office Engineering Services	Phone # (Office)898.5883
MTSU Box # 0032	Phone # (Cell)
E-mail	Submittal Date 09/30/2020

2. Project Categories (Select One)			
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	<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. Any funding request is a 'not-to-exceed' amount. Any proposed expenditure above the requested amount will require a resubmission.</p> <p>c. List the source of project cost estimates.</p>
3a. Project Title: Integrated control module/program for Air Compressor system
3b. Project Cost Estimate \$6000
3c. Source of Estimate Contractor (Atlas Copco) and in-house labor



#### 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 information for anticipated future operating and/or maintenance requirements occurring as a result of the proposed project.
- f. Provide any additional comments or information that may be pertinent to approval of the project funding request.

##### 4a. Scope: Work to be accomplished

Install control wiring between 4 existing air compressor cabinets.

Connect to control module.

Program sequence of operation.

##### 4b. Scope: Benefit Statement

70% of cost of air compressor system is the energy consumed to load and unload the system based on user demand. With the added control module the system can be optimized to have each of the cabinets to have an equal amount of running hours. This will reduce the required service intervals for the compressors. It will allow the creation of narrow pressure bands and can reduce inefficient running time of the machines by as much as 7%.

<b>4. Project Description (continued)</b>
<p>4c. Location of Project (Building, etc.)</p> <p>New Science Building</p>
<p>4d. Participants and Roles</p> <p>Contractor (Atlas Copco)</p> <p>Facilities technicians</p> <p>Facilities Systems engineering support</p>
<p>4e. Future Operating and/or Maintenance Requirements</p> <p>Allowing the program to set and choose the proper number of units to run to meet demand will reduce the amount of interaction of facilities personnel. By optimizing the unit run hours the service intervals will be reduced as well.</p>
<p>4f. Additional Comments or Information Pertinent to the Proposed Project</p>

**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.)

5b. Annual Energy COST Savings (\$)

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

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