Rec 12/15/13

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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 Jeff McConnell	
Department/Office Facilities Services	Phone # (Office) 615.898.5883
MTSU Box # 0032	Phone # (Cell)
E-mail	Submittal Date 19Feb2013

2. Project Categories (Select One)			
Select the category that best describes the project.			
☑	Energy Conservation/Efficiency	☐	Sustainable Design
☐	Alternative Fuels	☑	Other (Reliability)
☐	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 Soft Starter for Elevators at Walker Library
3b. Project Cost Estimate $35000
3c. Source of Estimate Time and Material from Kone Elevator
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

Furnish and Install a new hydraulic elevator soft start on all 6 elevators at Walker Library. Scope includes labor,material and permit fees.

4b. Scope: Benefit Statement

Increased Component Life
Phase protection helps prevent motor burnout during low-voltage situations and accurate selection of starting motor current, which increases component life.
Increased Availability
Reduced downtime to replace components that may be damaged due to burnout or low voltage.
Decreased Operating Expenses
Reduces operating expenses for costly repairs that may not be covered under our state maintenance agreement.
Potential Energy Savings
Reduces the amount of energy used by monitoring the load on the motor.

4. Project Description (continued)

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

Walker Library

4d. Participants and Roles

Facilities- scheduling

Kone Elevator- installation

4e. Student participation and/or student benefit

Smoother ride in car, less downtime from upgrade of equipment

4f. Future Operating and/or Maintenance Requirements

Maintain the elevators per the state contract.

A soft start reduces mechanical stress on the motor, decreases energy consumption and extends the system's service life.

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

The motor starter controls the electrical voltage and current from our building power source to our elevator. The soft start reduces the inrush current and helps control the ride of the car.

A soft starter is used to temporarily reduce motor load and torque during startup. Instead of applying the full voltage available to start the motor when powered on, a soft starter ramps up voltage according to the application.

A Soft Starter will provide potential energy savings by changing the amount of energy used by the motor at start up, while keeping the motor speed the same.

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. ($)

77 total service calls in the last 12 months =6 calls/month Standard is 3 calls /month
Assuming an average cost of $500/call = $38500
If we reduce the number of calls by 1/2, you save $19250

Simple payback of two years on estimated project cost from reduced maintenance requirements.

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