Rec 90/16



## 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 Alan Parker	
Department/Office	Phone # (Office)
Facilities Services Department	615-898-2392
MTSU Box # 32	Phone # (Cell)
32	615-948-3082
E-mail alan.parker@mtsu.edu	Submittal Date
	9-30-16

2. Project Categories (Select One)					
Select the category that best describes the project.					
<b>V</b>	Energy Conservation/Efficiency	Sustainable Design			
	Alternative Fuels	Other			
	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 BTU meter installation

3b. Project Cost Estimate \$6,429

3c. Source of Estimate

Quote from vendor + \$500 installation + 10% overhead + 5% contingency

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

#### 4. Project Description

(Completed in as much detail as possible.)

- 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

Installation of a new BTU meter to monitor energy usage at one of the main air handlers in the new Science building.

#### 4b. Scope: Benefit Statement

The installation of the BTU meter will allow us to establish a base energy usage for one of the air handlers in the new Science building. As future energy conservation measures are implemented in the areas served by this air handler, we will be able to verify and quantify the actual energy savings.

4. Project Description (continued)
4c. Location of Project (Building, etc.)
New Science Building
4d. Participants and Roles
Alan Parker - Director of Engineering
Linda Hardymon - Center for Energy Efficiency Jeff McConnell - Engineer
Con Moconnon Engineer
4e. Student participation and/or student benefit
4f. Future Operating and/or Maintenance Requirements
Very little maintenance will be required since this technology does not
require an insertion probe.
require an incertain probe.
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.)
TBD

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

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

5d.Matching or Supplementary Funding (Identify and Explain)
None



# CONTROL MANAGEMENT TECHNOLOGY

# Quotation

333 TROY CIRCLE SUITE X KNOXVILLE, TN 37919

Date	Quotation No.
9/30/2016	093016-00

		Ac		

MIDDLE TENNESSEE STATE UNIVERSITY ALAN PARKER MTSU BOX 32 MURFREESBORO, TN 37132

Description   Qty   Unit Price		RFQ
MIC U3000-B  MICRONICS, U3000 "B" ULTRASONIC FLOW TRANSMITTER 120/240 VAC PART # 810-2001BCP  MIC 310-0049  310-0049 CALEC W/MODBUS MULTIFUNCTION HEATING AND COOLING ENERGY CALCULATOR PWR SUPPLY 100-240VAC, 15VA, 50/60 Hz OR 12-24 VDC, 12-36VAC, 1VA. TEMP RANGE -40-200C. 2 PULSE INPUTS/OUTPUTS SWITCHABLE. OPTICAL M-BUS INTERFACE		LARGE PIPE M
TRANSMITTER 120/240 VAC PART # 810-2001BCP  MIC 310-0049  310-0049 CALEC W/MODBUS MULTIFUNCTION HEATING AND COOLING ENERGY CALCULATOR PWR SUPPLY 100-240VAC, 15VA, 50/60 Hz OR 12-24 VDC, 12-36VAC, 1VA. TEMP RANGE -40-=200C. 2 PULSE INPUTS/OUTPUTS SWITCHABLE. OPTICAL M-BUS INTERFACE	Item	Price Total
HEATING AND COOLING ENERGY CALCULATOR PWR SUPPLY 100-240VAC, 15VA, 50/60 Hz OR 12-24 VDC, 12-36VAC, 1VA. TEMP RANGE -40-=200C. 2 PULSE INPUTS/OUTPUTS SWITCHABLE. OPTICAL M-BUS INTERFACE	ИС U3000-B	3,543.00 3,543.0
	AIC 310-0049	0.6

PLACE ORDERS TO: CONTROL MANAGEMENT TECHNOLOGY P.O. BOX 50125 KNOXVILLE, TN 37950

Signature

Total \$5,156.00

The John M. Norris

Phone #	Fax#	E-mail	Web Site
865.584.0208	865.584.3763	sales@controlmgmt.com	WWW.CONTROLMGMT.COM