

CENTRAL CAROLINA COMMUNITY COLLEGE

1075 E. CORNELIUS HARNETT BLVD.

LILLINGTON NC 27546

ETHERIDGE BUILDING

ENERGY EFFICIENCY COMMUNITY BLOCK GRANT PROGRAM

RFP # 43-A-2010EECBGED1

HVAC CONTROLS RETROFIT SCOPE OF WORK

- 1.) Remove existing HVAC Controls and install new DDC based controls. Contractor may reuse any conduits and wire as needed. We are requiring an Interface in the Boiler Room that will allow for viewing and editing of set points and temperatures for the system.
- 2.) Successful Contractors will need to be located within a 100 mile radius of Lee County, NC for required job meetings and audits.
- 3.) Contractor Qualifications: The controls contractor shall be an authorized factory representative for the manufacturer specified. They shall demonstrate the installation of at least three systems of similar scopes. Company shall be licensed by the State of North Carolina to do unlimited electrical work.
- 4.) Contractor will install software package on Owners remote desk top located at 1105 Kelly Dr. Sanford, NC 27330 as well as 1075 E. Cornelius Harnett Blvd, Lillington NC,27546.
- 5.) Acceptable Vendors/Manufacturers:
 - A. Energy Automation Technologies
 - B. Hoffman Building Technologies
 - C. Siemens
 - D. Brady Trane
 - E. Honeywell Automation and Control Solutions
- 6.) Requirements for HVAC controllers on CCCC Network
 - A. Must be BACnet compliant
 - B. Must incorporate TCP/IP v4 for network communications
 - C. Must use routable protocols to communicate from clients to device over different network segments and VLANs without using NAT
 - D. Easily accessible Web Based Interface
- 7.) Minimum Points for Air Handlers #1and #2
 - A. Economizer/Out Door Air set point
 - B. Economizer/Out Door Air lockout set point

- C. Supply Set Point
 - D. Return Set Point
 - E. Mixed Air Temperature
 - F. Fan Start/Stop/Proof
 - G. Freeze Protection
 - H. CFM Sensor/Static Pressure
 - I. Relief/Return Fan Stop/Start
 - J. Relief/Return Fan Damper Control
 - K. 7 Day Scheduling/Set Back Temperature Control
 - L. Hot Water Valve Control
 - M. Hot Water Leaving Temperature at Coil
 - N. Co2 Sensor
 - O. Zone Damper Control
 - P. Trending
 - Q. Supply Temperature
 - R. Return Temperature
- 8.) Minimum Points for Air Handlers #3
- A. Same as Air Handlers #1 and #2 but no Zone Dampers
- 9.) Minimum Points for Air Handlers #4 and#5
- A.) Same as # 1 and # 2 Air Handlers but no Return/Relief Fans
- 10.)Minimum Points for Boiler
- A. Start/Stop/Status
 - B. Enable and Disable Temperature
 - C. Supply and Return Temperature
 - D. Hot Water Pump Start/Stop/Proof
- 11.)DX Cooling Units
- A. Start/Stop/Status
 - B. Staging of Compressors
 - C. Scheduling
- 12.)Exhaust Fan #1
- A. Start/Stop/Status
 - B. Scheduling
- 13.) Web Based Interface
- A. Embedded Workbench Software
 - B. Web User Interface
 - C. Graphics
 - 1. Floor Plan Lay Out
 - 2. AHU's with all set points and controls
 - 3. Boiler
 - 4. Exhaust Fan
 - 5. Hot Water pumps
 - 6. DX Units

7. Hot Water Coils and Valves
8. Trending
- 14.) Contractor can use old control valve bodies and replace packing and actuators.
- 15.) Contractor will be responsible for disposing of all material from job. Contractor will follow all EPA, Federal and State Guide Lines for disposing of all material and provide CCCC with all documentation of disposal.
- 16.) Provide the labor and material to install the above work. All work can be performed during normal working hours as long as there is no disruption in classes. The Facility will be clean and ready for use and operation at all times.
- 17.) Warranty will be for two year for parts and one year on labor
- 18.) Room Sensors will have display and adjustable temperature
- 19.) All Water Valves and AHU Dampers need to be Spring Return
- 20.) Provide Owner Training on New Controls after completion of work and Phone Support for the Warranty Period. Training will be 2 classroom, 4 hour sessions and two job site, two hour sessions.
- 21.) Successful Contractor must provide a year power savings comparison between old controls and new controls. This Comparison must be defensible.
- 22.) Contractors must adhere to the following provisions if applicable:
 - A. State Historic Preservation Office review
 - B. National environmental Policy Act review
 - C. Davis Bacon
 - D. Buy American
 - E. Post vacancies with Employment Security
 - F. Waste management plan
 - G. Whistle blower provisions
- 23.) Links to References for Requirements of RFP #43-AA-2010EECBGED1
 - A. NC Recovery / OERI home page
<http://www.ncrecovery.gov>
 - B. NC State Energy Office home page:
<http://www.energync.net>
 - C. Wage Determinations Online
<http://www.wdol.gov/>
 - D. DUNS Number
http://www.grantsgov/applicants/request_duns_number.jsp
 - E. NC Grants
<http://www.ncgrants.gov/NCGRANTS/HOME.jsp>
 - F. Davis Bacon
http://www.1.eere.energy.gov/wip/davis-bacon_act.html

Notes:

- 1.) Low Bidder must supply a certificate of insurance to CCCC upon acceptance of project. All contractors & sub contractors must also provide a certificate of insurance.
- 2.) The Contractor will be responsible to repair any damage to landscape, buildings, roads, and parking lots.
- 3.) CCCC is a tobacco-free workplace. Contractors will refrain from using tobacco products on campus.
- 4.) Contractors will conduct themselves in a professional manner at all times. Dress should be professional as well as conduct; Contractors will not have any interaction with students at any time on campus.
- 5.) Contactor will obtain all permits required relating to this scope of work.
- 6.) CCCC will work with the low bidder to schedule completion of this project.
- 7.) CCCC is dedicated to the safety of all personnel, staff, students, faculty and contractors. Contractors will use best practice safety measures with all work being done on campus.
- 8.) Attendance at the Pre-Bid Meeting is Mandatory.