

1900 Spring Rd Suite 400 Oak Brook, Illinois 60523 www.ameresco.com

October 1, 2019

Mahomet-Seymour CUSD #3 302 W State St. Mahomet, IL 61853

Dear Trent,

Ameresco, Inc. would like to thank you for the opportunity to evaluate the facilities at Mahomet Seymour High School for energy conservation opportunities and facilities improvements. Through discussions with your staff and site surveys, we have identified the upgrade of the high school's building automation system as an area of improvement.

Mahomet-Seymour can use Performance Contracting to have Ameresco perform turnkey implementation, construction management and commissioning of this project. On the following pages, we have included scope descriptions, costs, energy savings and utility rebate estimates.

As part of our process, Ameresco developed a scope of work and requested bids from three controls vendors. Only two contractors responded with pricing, of which we chose the best scope and pricing to align with the district's current needs. The third contractor declined to price the developed scope of work.

Our approach consists of upgrading the controls system in a couple of phases in order to better accommodate the district's finances. This first phase will give the district digital visibility and temperature monitoring of the entire building. In the next phase(s) we plan on replacing the pneumatics and adding devices/points to provide the highest level building automation system with unlimited growth capabilities and integration of all schools.

Benefits of this phase:

- Reduce utility and maintenance costs
- Upgrade antiquated controls panels
- Eliminate reliance on a single controls contractor
- Ability to better manage occupant comfort
- Increase building efficiency
- Assist facility staff in troubleshooting
- Unlimited expansion for future projects/schools

Best Regards,

Diana Vargas Senior Account Executive



1900 Spring Rd Suite 400 Oak Brook, Illinois 60523 www.ameresco.com

Digital Controls Upgrades

Replace existing building automation front end computer with new

- Create a solid foundation to continually expand the building automation system as old equipment is updated.
- Complete building floor plan graphic
 - All space temperatures and space setpoints available on floor plan
- Floor plan graphic and temperatures can be accessed by any authorized web connected device (computer, tablet, smartphone).
- Receive alerts if a space is not meeting the desired setpoint temperature
 - o Space temps can be restricted so end users have limited control of setpoints.
- Schedules will be implemented to save additional energy when rooms are not in use.

Retrofit Pneumatic Thermostats

- Provide digital functionality
- Remote monitoring of system at each thermostat to quickly identify which rooms have leaky or malfunctioning pneumatics.
 - Existing pneumatics systems to remain
- Programmable temperature setpoints and setbacks
- VAVs, Unit Ventilators, AHUs Cabinet Unite Heaters, and Finned Tube Radiators

Additional sensors to pneumatic air handlers (AHUs)

- Fail safe from freezing conditions, not currently protected against
- Supply and return air temperatures to verify proper operation

Convert Alpha controlled devices to new front end system

- Existing device hardware will be utilized. Software programming will be rewritten to allow controllability of existing hardware by any future controls contractor.
- Library and Auditorium VAVs, (1) AHU

Pneumatic System Analysis

- Identify problem spaces and devices of existing pneumatic system to reduce/eliminate hot and cold calls.
- Formulate a plan for repair or replacement of pneumatics, including integration to new control system.

Owner Controlled Contingency

- \$20,000 owner controlled contingency included in total estimated project cost
 - Estimated amount for unforeseen conditions, including:
 - Disconnected electrical runs
 - Non-functional existing digital components
 - Ceiling/wall repair work

Estimated Energy Savings/Incentives

- Estimated electrical and gas savings of \$20,000-\$31,000 per year.
- \$63,000-\$98,000 in estimated utility rebates from Ameren.



1900 Spring Rd Suite 400 Oak Brook, Illinois 60523 www.ameresco.com

Costs and Savings

Estimated Controls Project Cost: \$315,000

Cost After Rebate: \$240,000

Estimated Simple Payback Term: 10 years