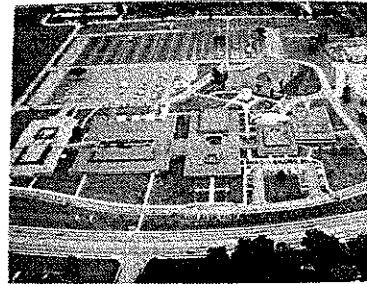




Final Proposal Executive Summary

The following executive summary for Nashville State Community College Detailed Energy Study includes:

- Executive Summary
- ECSM Descriptions
- Schedules 1, 2, 3, 4, & 5
- Timelines on Gantt Chart
- M&V Plans



Summary

Siemens is honored to provide our Final Proposal for Nashville State Community College. It is our goal during the Final Proposal stage of the delivery order process to thoroughly investigate project pricing, measurement and verification methodologies for ECSM's, and generate project timelines with a Gantt chart. Any changes to the DES calculations are also included behind each ECSM. The proposal includes the following energy conservation saving measures:

- ECSM #1 - Gas Meter Consolidation
- ECSM #2 - Mechanical Upgrades
- ECSM #3 - Water Conservation
- ECSM #4 - Lighting Retrofits
- ECSM #5 - Vending Miser
- ECSM #6 - Garage Door Replacement/Insulation

ECSM Descriptions

ECSM #1 - Gas Meter Consolidation

Siemens is proposing to combine the two gas meters on the campus back into a single meter and also to convert existing electric resistance heating rooftop units over to gas fired products.

ECSM #2 – Mechanical Upgrades

The following mechanical upgrades have been combined into this ECSM

- RTU Replacement A-71 Building
- RTU Replacements PEG Building
- Preheat Control Valves-Library Bldg



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Underground Pump Relocation-Clement Building
WSHP Loop Optimization-Clement Building
Condenser Water Loop Optimization-Powerhouse
Computer Room HVAC Unit Installation

ECSM #3 - Water Conservation – Toilets, Urinals, and Lavatories

Siemens is proposing to replace the existing toilets, lavatories, and urinals with new low flow, vitreous china units. The existing water valves on the urinals and toilets will be replaced with a Sloan Flushometer valve to standardize the requirement on campus.

ECSM #4 - Lighting Retrofits

Siemens proposes that all T-12 magnetic lamps and magnetic ballasts be retrofitted with new T-8 lamps and electronic ballasts. The retrofitted units will reduce power consumption and reduce cooling requirements due to less heat generated from the fixture. Also, new LED lights will be installed on sixteen-foot centers and placed on the existing emergency lighting circuit utilizing UL listed lighting inverters as backup power. The existing 2x4 troffers that are on the emergency lighting circuit now will be converted back over to the normal lighting circuit.

ECSM #5 - Vending Miser

Siemens is recommending installing 15 Vending Miser controllers on all existing vending machines on campus. The savings are generated by the machines' display lighting being shut off during unoccupied hours and compressor cycling.

ECSM #6 - Garage Door Replacement

Siemens is proposing that four uninsulated garage doors on campus be replaced with insulated type coiling doors and lintel seal.