

Authorization of New Capital Improvements Project – Western Carolina University

G.S. 143-64.17F authorized state agencies to utilize guaranteed energy savings contracts as a method to reduce the state's increasing utility costs, improve efficiencies of operations, and reduce environmental impacts. The President's Advisory Committee on Efficiency and Effectiveness (PACE) and the UNC Tomorrow Commission also identified guaranteed energy savings projects as important tools to achieve facility efficiencies and proper environmental stewardship. G.S.143-64.12 requires that all state buildings reduce energy consumption per gross square foot 20% by 2010 and 30% by 2015 based on fiscal year 2002-2003 consumption. The UNC Sustainability Policy, adopted by the Board of Governors in October 2009, authorizes the implementation of sustainable practices in buildings to meet or exceed statutory requirements to reduce energy and water use, while maintaining comfort and giving priority to the installation of high-efficiency equipment as part of an ongoing sustainability action plan.

The Board of Trustees of Western Carolina University has requested authority to establish a capital improvements project to enter into a guaranteed energy savings contract to improve energy efficiencies, replace inefficient equipment and infrastructure, and reduce water consumption on the WCU campus. The project involves roughly 22% of WCU's central campus and would include providing more efficient lighting, lighting controls, and a relighting design in Hunter Library -- an unfunded project for more than a decade. Additional energy conservation measures (ECMs) include building envelope upgrades in six buildings, a partial window replacement in Hunter Library, building control upgrades, HVAC system improvements, and the replacement of an obsolete chiller. Sustainability measures consist of adding a solar hot water heating system at Ramsey Activity Center, solar photovoltaic system at Hunter Library, and a student-designed solar tree adjacent to Coulter Building, all of which will send real-time energy data to an energy dashboard kiosk in the Hunter Library lobby. Improvements to the Central

Steam Plant consist of new steam traps and control modifications to improve boiler efficiency. A campus-wide computer power management system program will be installed that powers down certain computers at times when they are not in use. Water conservation measures include low-flow plumbing fixtures, an ozone injection system for laundry facilities, and irrigation system optimization for the baseball field.

Working with the State Energy Office and their list of pre-qualified energy service companies, WCU selected ConEdison Solutions, Inc. as the energy services company (ESCO) to execute the performance contract. ConEdison has validated the estimated project costs and utility savings and is willing to enter into a contract to guarantee that 100% of the projected savings will be achieved, and if not, ConEdison Solutions, Inc. will be liable for any shortfall. The estimated cost of the project to be financed is \$5,648,605 and would be financed with a tax-exempt loan to be repaid within eighteen years from utility savings. After the debt is paid, the savings produced by the improvements, estimated to be \$651,737 per year, will continue to accrue to WCU and the State. The project is expected to reduce the current energy consumption of six buildings by at least 34%.

To finance this project, WCU will solicit competitive proposals from qualified lenders. WCU expects a finance rate not to exceed 5% on an amount not to exceed \$6,000,000. The term of the loan will not exceed 18 years after a one-year construction period which is anticipated to commence in May 2011.

It is recommended that the request of the Board of Trustees of Western Carolina University be approved and that the proposed contract be forwarded to the Department of Administration, the Office of State Budget and Management, the State Treasurer, and the Council of State for final approval.