# GENERAL ASSEMBLY OF NORTH CAROLINA

## Session 2007

## Legislative Fiscal Note

**BILL NUMBER**: House Bill 1660 (First Edition)

**SHORT TITLE**: University/Community College Energy Savings.

**SPONSOR(S)**: Representatives Goforth, Fisher, and Thomas

**FISCAL IMPACT**

**Yes ( )** **No ( )** **No Estimate Available (X)**

| | FY 2007-08 | FY 2008-09 | FY 2009-10 | FY 2010-11 | FY 2011-12 |
|---|---|---|---|---|---|
| **REVENUES** | | | | | |
| **Community Colleges' Institutional Funds** | **See Assumptions and Methodology** | | | | |
| **EXPENDITURES** | | | | | |
| **State General Fund** | **See Assumptions and Methodology** | | | | |
| **Local Governments' General Funds** | **See Assumptions and Methodology** | | | | |
| **POSITIONS (cumulative):** | | | | | |

**PRINCIPAL DEPARTMENT(S) & PROGRAM(S) AFFECTED**: North Carolina Community College System; University of North Carolina; counties that support community colleges; State Energy Office

**EFFECTIVE DATE**: Effective July 1, 2007, for contracts entered into on and after that date.

**BILL SUMMARY**: Enacts new sections of GS Chapter 143, 115D, and 116 to specify state policy that higher education institutions (UNC and community college system), if they adopt energy savings practices, may retain money saved for future energy-saving practices. Establishes requirements for participating institutions, specifies procedure to determine savings and provides for the use of those savings.
*Source: Bill Digest H.B. 1660 (04/18/2007)*

**BACKGROUND:** Governor Easley launched his Utilities Savings Initiative in 2002 with the goal of reducing energy use in state facilities by 20% by 2008. In 2006, the General Assembly established a goal of 10% reduction in water consumption for state agencies. To address these mandates, each campus in the University of North Carolina (UNC) system is required to submit an annual Strategic Energy and Water Plan to the State Energy Office. These plans detail campus energy consumption and energy management and cost saving efforts. For example, the NCSU plan list five focus areas: energy data management, energy supply management, energy use in facilities, equipment efficiency, and campus integration. For each focus area, the campus reports past year accomplishments and planned activities for the next year. It shows the cost of the energy project, how much the project will save, and the source of funds. Some campuses have designated energy managers in their facility services division to coordinate these plans.

Unlike UNC, the community colleges are not state agencies; therefore, they are not required by law to develop energy savings plans. Five community colleges, however, have voluntarily developed such plans.

**ASSUMPTIONS AND METHODOLOGY**:

<u>UNC</u>

HB 1660 provides UNC with an additional tool to finance energy and water conservation projects. Campuses currently pay for energy cost savings projects with their current operating budgets, with repair and renovation funds, with capital funds, and with guaranteed energy savings contracts. A description of each method is as follows:

- Current Operating Funds – Since 1991, UNC campuses have had management flexibility over their budgets to allocate funds where needed. For example, in FY 2005-06 there was $162.7 million from lapsed salary funds and $65.5 million from other sources that were reallocated to one-time purposes. NC A&T used such one-time funds to purchase gas-electric GATORS to reduce their fuel costs. However, UNC officials state that the use of operating funds for capital projects related to energy conservation is sometimes limited by Office of State Budget and Management strict interpretation of G.S. 143-23.
- Repair and Renovations (R&R) Reserve – Each year UNC receives 46% of the funds appropriated for repairs and renovations of state facilities. In FY 2006-07, UNC received $106 million in R&R funds and spent 22% of those funds on repairs to electrical, plumbing and HVAC systems that had a direct impact on energy and water consumption. UNC campuses also spent 5% of their R&R funds on improvements to existing facilities for energy efficiency. In the UNC 2007-13 Capital Improvements Plan, the 16 UNC campuses, the NC School of Science and Math, and UNC affiliated institutions like UNC TV, plan to spend $259.2 million on repairs to electrical, plumbing and HVAC systems and $47.9 million on improvements to existing facilities for energy efficiency over the next six years. This spending represents 36% of requested R&R funds and is subject to annual legislative appropriations.
- Capital – The voting public approved the 2000 Higher Education Bond Program to provide $2.5 billion to UNC to construct or renovate 318 facilities. Since 2000, UNC has completed 44 projects that will contribute to energy and water savings on campuses. Most major renovations have included modernizing electrical, plumbing, and HVAC systems. Other projects included installation of energy efficient windows, replacement of chiller systems, and improvement of climate control systems. UNC has 25 bond projects underway that will reduce energy costs.

  UNC capital projects are also funded with gifts, auxiliary funds (dining, housing, athletics, etc.), and facilities and administrative receipts (overhead receipts). Renovation projects funded by these sources often include energy saving changes to electrical, plumbing, and HVAC systems.

- Guaranteed Energy Savings Contracts – Beginning in 2003, UNC was allowed to use guaranteed energy savings contracts for "the design and installation of equipment or the repair or replacement of existing equipment or meters" (GS 143-64.17(3)). With guaranteed energy savings contracts, the cost savings resulting from an energy efficiency project are used to pay back the project's financing cost. Only $50 million in projects can be financed statewide for all state agencies at any one time. UNC-G is the first campus in the UNC system to try this financing method on the upgrade of HVAC and electrical systems of five buildings. The project is guaranteed to reduce utility cost by $7.9 million over the next 12 years.

Given the number of methods UNC has to finance energy and water conservation projects, this fiscal note cannot provide an estimate of the number of projects over the next five years that might utilize the method authorized in HB 1660. One impediment to campus utilization is that energy budgets on UNC campuses have been under-funded in recent years. In FY 05-06, campus utility expenditures were $11.5 million over budget requiring a reallocation of funds as allowed by management flexibility. A request of $11.5 million in the 2006 Session to cover this shortfall was denied by the General Assembly. Energy savings have been a critical tool for managers trying to keep up with escalating utility costs.

Another impediment to using HB 1660 might be the reporting and monitoring requirements imposed by this legislation, such as the requirement for submission of plans to the State Energy Office and having approval of energy projects by a licensed architect or professional engineer. UNC campuses will evaluate the cost/benefit of the energy financing tools available, including time and costs of reporting and monitoring required by each option. UNC campuses may not be willing to undertake these extra steps for funding, but instead wait for carryforward funds or reallocation of funds for their projects.

<u>Community Colleges</u>

Per G.S. 115D-32 community college maintenance of plant expenses, including utilities, are the responsibility of the tax-levying authority of each institution. Consequently, the local government that provides for an institution's utility expenses would be impacted by HB 1660, not the State. Note that the local government would experience an impact only if any energy savings retained under the provisions of this bill would have otherwise reverted. The size of the impact depends on multiple factors, which this fiscal note cannot estimate:

- **Program utilization:** HB 1660 does not require community colleges to participate in this program; therefore, the fiscal impact will depend in part on the rate of participation, which is unclear. First, it is unknown how many community colleges would implement energy savings measures. Neither HB 1660, nor any other provision of State law requires community colleges to implement such measures. Since local governments are responsible for providing funds for maintenance of plant and capital projects, voluntary implementation would likely depend on funding decisions made on the local level. Second, even if a community college implements an energy savings measure, it is unclear whether the benefit provided by this bill would be sufficient enough to outweigh the costs associated with the required reporting and monitoring.

- **Magnitude of energy savings realized:** As noted above, only five community colleges have energy plans. Without additional information, it is not possible to estimate the potential size of the energy savings that would be transferred to the restricted Institutional Fund for future energy savings measures.

- **Adequacy of current utility budgets:** Since community colleges are local institutions, state-wide data is not readily available on total community college utility expenditures or how these total expenditures compare to the utility budgets at each institution. If an institution's utility budget is not adequate to meet current needs, any savings realized through an energy savings measure may simply reduce the amount by which the line item is overspent. In such a case, it is possible that the savings realized do not result in a year-end credit balance available for transfer.

Energy Office

The Governor's, House, and Senate proposed budgets for FY 2007-09 restructure the Energy Office from a focus on grant administration to a focus on energy efficiency in State buildings through the Utility Savings Initiative (USI). The Governor's budget and House budget maintain the Energy Office to oversee this directive while the Senate budget eliminates the Energy Office but transfers all existing USI functions to the State Construction Office located in the Department of Administration. Due to this restructuring, significant staff time normally devoted to grant oversight will be replaced by staff time to administer the USI. Since the intent of the Governor's Office and the Legislature is the same, it is anticipated that the Energy Office will require no additional staff as a result of this bill.

**SOURCES OF DATA**: NCSU Strategic Energy and Water Plan Update Fiscal Year 2005-06 (Office of Energy Management); UNC Summary of Institutional Annual Reports for Special Responsibility Constituent Institutions for 2005-06; UNC 2007-13 Capital Improvements Plan; HB 1473, the 2007 Appropriations Act (4th and 8th editions)

**TECHNICAL CONSIDERATIONS**: None

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