CHARLOTTE

City Council
Follow-Up Report

April 25, 2012

March 26, 2012 - City Council Business Meeting

CMGC Energy and Lighting Update

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At the March 26th 2012 City Council meeting, Mayor Pro Tem Cannon raised the matter of "T-12 bulbs" in the City Council offices as well as incentives offered by Duke Energy for Energy conservation. Below is a summary of efforts to continually improve energy efficiency in the Government Center, including replacement of T-12 lighting throughout the building.

Beginning in the mid-1990s, an energy plan was implemented addressing various aspects of energy management within City facilities. One area of emphasis was identifying and improving equipment that had short payback cycles ("low hanging fruit") such as run times of equipment and lighting.

One example of this was a Charlotte Mecklenburg Government Center project completed in 1998 which replaced T-12 fluorescent fixtures with energy efficient T-8 lamps, and most of the incandescent lights with compact fluorescents or halogen. This month consulting engineers with Duke Energy are completing an evaluation to replace existing T-8s in the CMGC with still better technology, such as lower wattage T5s or LEDs. Their work also focuses on a few remaining conference areas still using incandescent lighting. LED and CFL (Compact Fluorescent) technology have limitations associated with the ability to provide quality dimming properties but technology is improving. Since 2009, the Charlotte Mecklenburg Government Center has achieved the coveted US EPA/US DOE *Energy Star* Rating.

Additionally, the CMGC is a partner with Duke Energy and others in *Envision Charlotte* (a public and private partnership of building owners within the I-277 loop whose goal is to reduce energy consumption by 20%); and the City is a participant in the Duke Energy *Smart Buildings Program*. This program provides tools, resources and assistance with the *Duke Energy Incentive Program* which provides rebates to building owners for energy efficient equipment purchases. Engineering and Property Management has received $29,999.16 from Duke Energy with another $36,085.00 in payouts pending final approval.

Energy conservation at the CMGC is part of the larger energy plan reviewed and updated annually by Engineering and Property Management. Energy management efforts also include tracking and benchmarking energy use. The approximately five million square feet of real estate maintained by Engineering and Property Management is some of the most energy efficient space in the southeastern US.