



Memorandum

TO: Mayor and Council

FROM: Eric Stockton, Building Services Officer

DATE: October 27, 2014

SUBJECT: Response to Council Resolution No. 20140828-095

On August 28, 2014, the City Council adopted Resolution 20140828-095 to promote a policy of energy conservation, and directed the City Manager to establish a standard for thermostat settings for cooling during summer months in all City office buildings that meets or exceeds the Texas Facilities Commission standard, except in those justifiable circumstances when doing so would be operationally impractical.

The Building Services Department (BSD) has reviewed historical and current energy efficiency efforts, as well as the standards referenced in the Resolution. BSD also communicated with Texas Facilities Commission staff to gather information regarding their standards and implementation strategies for this issue.

As a result of this review and analysis, and in conformance of the requirements of the Resolution, the following standard will be implemented in City office buildings in response to this resolution. In office buildings with adjustable thermostats, a target setting of 75 degrees will be established with flexibility to adjust to maintain comfort levels of ± 2 degrees during occupied hours, and at a minimum of 85 degrees during unoccupied hours.

Exceptions to this standard include turning climate control systems off completely during occupied hours to conserve energy in large spaces when not in use (as is currently done in Council Chamber at City Hall). Equipment rooms such as telecommunications, audio visual, and server/computer rooms will operate at temperature settings required to ensure reliability and support equipment warranties. Other exceptions will be evaluated upon receipt of a written request by building occupants. Such requests will be reviewed and/or may require a field investigation of conditions to assess the need to modify the setting of the thermostat, or make other adjustments to the system to maintain comfort. Exceptions to this policy may reflect variations in thermostat location, air speed, radiant temperature, or humidity.

Historically the City has implemented several strategies to improve energy efficiency in City office buildings, including:

- HVAC re-commissioning and/or schedule optimization has been implemented at over 30 City facilities, including City Hall and OTC (the latter of which has received EPA's energy star rating for 5 consecutive years).
- Equipment upgrades(major and small HVAC, Building Controls and Thermal Energy Storage) including replacement of chillers, pumps, variable frequency drives, split systems, heat pumps or roof top package units at 27 locations; 36 Energy Management and Control systems installations and two thermal energy storage systems installations.
- Lighting and energy controls upgrades have been implemented at over 11 City facilities resulting in savings of 189 kWh and \$85,400 per year.
- Austin Energy has signed up eight City facilities in the past 12 months to participate in Austin Energy's Demand Response program.
- Since 2011, 100% of City facilities are operated using Green Choice power or other renewable sources.
- Austin Energy has completed rooftop solar installations at 53 City facilities, resulting in total capacity of 2,200 kW that is estimated to generate approximately 2.9 Million kWh per year.
- The Office of Sustainability expanded data management and tracking capabilities for City building energy use via the Facility Management Systems tool.
- The Office of Sustainability completed an energy efficiency scan of city buildings to identify potential energy conservation opportunities.

Since late 2009, the Municipal Energy Conservation Program (MECP) has implemented approximately 290 energy conservation measures (ECMs) in 174 facilities owned and/or operated by the City of Austin. These ECMS were implemented across City Departments including Austin Police Department, Austin Fire Department, Austin/Travis County Emergency Medical Services, Austin Convention Center, Austin Energy, Library Department, Austin Water Utility, Austin Bergstrom International Airport, Building Services, Fleet Services, Health and Human Services Department, Municipal Court, Parks and Recreation, and Public Works.

Additionally, efforts are underway in partnership with Financial Services, the Office of Sustainability, Building Services and Austin Energy to establish a sustainable funding source for future efficiency improvements to City buildings to increase and improve our efforts in this regard. This funding source will be utilized for addressing deferred maintenance and lifecycle replacement of older systems and equipment as well as other issues that affect energy efficiency, operation, and sustainability of City buildings.

If you have any questions please do not hesitate to contact me at 974-7948.

cc: Marc A. Ott, City Manager
 Rey Arellano, Assistant City Manager
 Lucia Athens, Chief Sustainability Officer
 Larry Weis, General Manager, Austin Energy