

## **Johnson County Energy Conservation Guidelines**

### **SHARED RESPONSIBILITIES:**

1. Every person is expected to become an “energy saver” as well as a conscientious “energy consumer.”
2. Johnson County is committed to and responsible for a safe and healthy environment.
3. Johnson County will regularly communicate the importance and impact of the energy conservation program to its internal and external constituents.
4. Most of the savings will be generated by changes to buildings during unoccupied times.
5. Occupancy is defined as the normal office hours for each building.
6. Staff and occupants are responsible for implementing the guidelines during the times they are present in County facilities.
7. All office machines (copy machines, laminating equipment, etc.) shall be switched off each night and during unoccupied times. Fax machines and networked printers may remain on.
8. Office Computers: During business hours, all PC’s should be programmed for the “power saver” mode using the power management feature. If network constraints restrict this for the PC, ensure the monitor “sleeps” after 10-minutes of inactivity. After Hours, all office computers on the *johnsonco* domain are managed to be on a minimal power mode. Monitors, local printers, speakers, scanners, etc. that may be connected to the computer shall be turned off each night.
9. All unnecessary lighting in unoccupied areas will be turned off. Staff and occupants should make certain that lights are turned off when leaving offices. Utilize natural lighting where appropriate.
10. Ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e. between hallways and common areas, gym or pool area).
11. Energy savings information will periodically be shared with staff and occupants.

### **BUILDING OPERATIONS:**

#### **General**

1. Proper and thorough utilization of data loggers will be initiated to monitor relative humidity, temperature, and light levels throughout county facilities to ensure compliance with guidelines.
2. Non-critical or non-essential exhaust fans should be turned off daily in areas that do not require their constant operation or during unoccupied hours.
3. The custodial staff and Site Operators are responsible for control of common areas, i.e. hallways, dining areas, etc.
4. Custodial staff and Site Operators are responsible for verification of the nighttime shutdown.
5. Johnson County Energy Management will perform routine audits of all facilities and communicates the audit results to the appropriate personnel.
6. Johnson County Energy Management will provide monthly energy savings reports to FAC Balance Scorecard.

#### **Cooling**

1. Occupied temperature settings should not be set below 74°F unless that area is identified as a critical environment that requires cooling below 74°F. Critical environment is defined by

## Facilities Management

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ASHRAE 70 2017, and Johnson County Energy Management.

2. During unoccupied times, the air conditioning equipment shall be off or setback to 85°F.
3. Air conditioning start times may be adjusted (depending on weather) to ensure room comfort when occupancy begins.
4. Ensure outside air dampers are closed during unoccupied times.
5. Ceiling fans should be operated in all areas that have them.
6. Relative humidity levels shall not exceed 60% for any 24 hour period. (unless otherwise specified)
7. Ensure dry food storage areas are maintained within code requirements. Typically, this is 55F – 75F temperature and 35% - 60% relative humidity. Utilize loggers to verify.
8. Cooling season occupied temperature range<sup>1</sup> = 74°F to 78°F, unoccupied set point = 85°F

### Heating

1. Occupied temperature settings should NOT be set above 72°F unless it is a critical environment.
2. The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather.
3. Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
4. Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
5. For heat pumps, ensure a 6 °F dead-band between heating and cooling modes.
6. Heating season occupied temperature range<sup>1</sup> = 68°F to 72°F, unoccupied set point = 55°F

<sup>1</sup> Set points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"

### Lighting

1. All outside lighting shall be off during daylight hours.
2. Gymnasium lights should be turned on only when the gymnasium is being utilized.
3. Custodians will turn on lights only in the areas in which they are working.

### Water

1. Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately.
2. Grounds watering should not take place during the heat of the day.
3. When spray irrigating, ensure the water does not directly hit the facility.
4. Consider installing water sub-meters on irrigation and cooling tower supply lines to eliminate sewer charges.

**Disclaimer:** Johnson County shall adopt, observe and implement these guidelines as provided. However, these guidelines are not intended to be all-inclusive, and they may be modified for local conditions. These guidelines supersede all previous instructions related to energy conservation or facility management, unless otherwise specified in a project-specific Basis of Design (BOD) or Owner's Performance Requirements (OPR), or otherwise mandated by building occupancy/use.