

# Energy Management Control Systems – Optimization

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### Introduction

The Air Force is required to save energy and will do so in part by operating and maintaining heating and cooling systems in the most overall energy efficient and economical manner possible. To efficiently achieve energy savings, Heating, Ventilation, and Air Conditioning (HVAC) systems controlled by an Energy Management Control System (EMCS) should operate to maintain appropriate temperatures and humidity levels according to facility usage type and schedules.

### Narrative

#### Set Point/Setback:

Set Point: temperature settings of HVAC equipment during facility occupied hours.

Setback: temperature settings of HVAC equipment during facility unoccupied hours, meant to help reduce energy costs.

Previously, individual MAJCOMs, and sometimes individual installations, determined set points and setback policies. To address this lack of standardization, the Air Force established the (draft) Facility Temperature Set Points, Set Back and Maintenance Policy for Air Force HVAC equipment. This narrative reiterates the set points, setback, and maintenance policy and provides guidance for the policy's implementation.

This Air Force HVAC policy does not change existing design criteria. Nor does it include areas within a facility that require different temperature set points, humidity levels, and schedules than those in Table 1 (e.g., areas containing specialized equipment or specialized weapon systems). Additionally, facilities with host nation or other formal labor agreement requirements that may conflict with the policy's requirements should follow the agreement requirements.

#### Set Point/Setback Temperatures:

HVAC control systems will be set to maintain space temperatures that will not exceed the conditions in Table 1 during occupied and unoccupied hours. Temperature setbacks that coincide with facility usage hours (e.g., night and weekend) will be used in all occupied, HVAC climate conditioned facilities to which the policy applies. MAJCOMs and Installations are authorized to establish local policies that are more stringent than those in Table 1.

**Table 1: Maximum Heating and Minimum Cooling Temperatures**

Occupancy	Heating Max Temp (deg F)		Cooling Min Temp (deg F)		
	Occupied	Unoccupied	Occupied	Unoccupied	Max Humidity**
Administrative areas*	70	55	73	80	50%
NAF retail space	70	55	73	80	50%
Community Areas such as theaters, youth facilities, etc.	70	55	73	80	50%
Warehouse***	60	55	80	80	50%
Shop Space***	65	55	76	80	50%

\*Administrative areas include all facilities with administrative space. Any admin space collocated with mission equipment defaults to the temperature and humidity requirements of the equipment.