



DEPARTMENT OF THE ARMY
HEADQUARTERS, 7th INFANTRY DIVISION AND FORT CARSON
FORT CARSON, COLORADO 80913-5000

REPLY TO
ATTENTION OF

AFZC-GC

28 May 2004

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Energy Efficiency Measures for FY04 (Cooling Season)

1. Implementation of the Command energy reduction program is on track to meet the 3% energy usage per square foot reduction goal set for FY04. Overall, electrical usage for Fort Carson in FY04 has been decreased by 4.7% while natural gas usage has decreased by 4.3% compared to the same time period in FY03.
2. Adherence to the energy efficiency measures during the cooling season is essential in order to minimize utility costs and to realize our energy program objectives. While it will be difficult to achieve our reduction goal, it is not impossible with everyone's cooperation.
3. The efficient use of our energy resources is the responsibility of everyone living and working at Fort Carson. Commanders and staff directors at all levels are to ensure compliance with the measures outlined in enclosure 1.

Encl


MICHAEL RESTY JR.
COL, CM
Garrison Commander

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ENERGY EFFICIENCY MEASURES FOR FY 04 (COOLING SEASON)

1. Command/Directorate Energy Conservation Officers (ECO) and Building Energy Monitors (BEM) will be primary points of contact for implementation of this policy. The ECO and BEM will perform reviews for conformance with this policy in accordance with assigned duties and initiate service or work requests for repairs and maintenance as appropriate. The ECO and BEM will report nonconformance with the policy to the Commander/Director, Facility Manager, representative for the Directorate or the Environmental Quality Working Group (EQWG) as needed to ensure compliance. Adherence to the cooling season policy will be strictly enforced at all levels of Command.

2. Use of natural ventilation, fans and evaporative coolers (also known as swamp coolers) are the preferred methods of cooling in this climate. Air conditioning is the least desired cooling solution. Requests for use of air conditioners in family housing must be submitted in accordance with procedures established by Fort Carson Family Housing, LLC. All other requests for air conditioning must be processed through DPW and DECAM IAW existing procedures set forth in FC Regulation 200-1. All air conditioning purchases will be required to comply with requirements for elimination of ozone depleting chemicals and will be made in consideration of the maximum energy efficiency affordable. Approval will be based on whether the facility electrical system will support the request and on the criteria below.

3. Air-conditioning or chilled air is authorized for the following areas:

a. Rooms containing equipment requiring a controlled atmosphere, e.g., mainframe computers or servers (not PC's). Contact DOIM (6-2270) for approval on ALL servers or mainframe computers prior to any air-conditioning installation.

b. Medical and dental facilities (patient care areas).

c. Division and brigade main conference rooms while occupied.

d. Dining areas, recreational facilities, Commissary, and Post Exchanges.

e. Barracks where available.

f. Buildings on the Chiller plant.

g. Day care facilities IAW regulatory standards.

h. Rooms occupied by individuals with recognized medical conditions that require a controlled atmosphere.

i. Family Housing.

4. Air conditioning requirements (other than family housing):

a. Building cooling systems will be energized beginning 1 Jun 04 and will be de-energized beginning in Sep 04. (Heat will be turned off beginning 1 May 04 and will not be turned back on until 1 Oct 04.)

b. Areas authorized air conditioning will not be cooled to a temperature lower than 78 degrees Fahrenheit. Medical facilities are authorized a temperature between 70-72 degrees Fahrenheit.

c. Air conditioning units that have thermostatic controls must be operated to comply with the authorized cooling temperatures. The DPW will maintain appropriate cooling temperatures for those systems controlled by the Utility Control System (UCS). Air conditioners will not be turned on when outside temperature is below 78 degrees Fahrenheit.

d. When purchasing new air conditioners the energy efficiency must be considered. New central air conditioners must have a Seasonal Energy Efficiency Rating (SEER) of 12 or higher, and a room air conditioner must have an Energy Efficiency Ratio (EER) of 9.5 or higher.

e. Air conditioners must be turned off at close of business each day.

f. All windows and doors will be kept closed when air conditioners are on.

g. Air conditioning units that have manual thermostatic control will be turned off when not needed. The UCS will control the shut down of other AC systems on post.

h. Buildings on the UCS will be managed by the DPW base operations contract.

5. With approval of Fort Carson Family Housing, LLC, family housing tenants may have up to two window air conditioners in their housing units. Purchase and installation of these air conditioners will be at the tenants' expense; the air conditioners must meet Fort Carson size, power and energy efficiency specifications; and use of the air conditioners will meet the energy conservation measures stated in this policy. To ensure housing units are not damaged, window air conditioning units must be installed/removed by a Fort Carson Family Housing, LLC, approved contractor. Tenants should contact the Fort Carson Family Housing, LLC, office at 226-2268 to inquire about this new program.

6. The major subordinate unit staff duty officer (SDO) will conduct daily energy inspections. The FOD will include energy inspections and submit reports IAW standard procedures.

7. Turn off all lighting, incandescent and fluorescent, upon leaving a room regardless of duration of vacancy. Do not use lights when adequate outside light is available.

8. Turn off personal computer (PC) monitors (especially CRT monitors since they create heat) when not in use. Leave the CPU on, since DOIM requires them to be on 24/7 for security purposes. Additionally, it is strongly recommended that the computer and monitor be attached to a Surge Protection Device, like an UPS, due to electrical anomalies and lightning storms.

9. Additional electrical savings can be realized by lighting only that portion of a building in which night crews are working.

10. Off duty hour and exterior lighting will be eliminated, except when it is essential for safety and security purposes. Except for security lighting required by AR 190-11, no Army requirement exists for security or firelights over the doors of buildings.

11. The DPW will continue to place emphasis on cleaning and preventative maintenance on HVAC equipment, e.g., oil bearings, filters, etc. The UCS will be utilized to reduce usage while minimizing impacts on building occupants.

12. Encourage these easy to do energy saving measures:

a. Deflect daytime sun with vertical louvers or awnings on windows, or draw draperies and shades in sunny windows. Keep windows and outside doors closed during the hottest hours of the day; open windows in the morning or on shady side of the building for natural cooling.

b. Keep the lights low or off if day lighting is adequate. Electric lights generate heat and add to the load on the air-conditioning equipment.

c. When purchasing energy consuming appliances, buy items bearing the Energy Star label, as they are the most energy efficient.

d. On cooler days and during cooler hours, open windows, doors and bay doors instead of using air-conditioners. Use fans or evaporative coolers.

e. Dress for higher temperatures. Neat casual clothes of lightweight fabrics are comfortable and are acceptable almost everywhere during the summer.

13. For additional energy conservation information visit the DECAM web site <http://www.carson.army.mil/Decam/Homepage.html> or call 526-1739 or 526-4666.