



DEPARTMENT OF THE ARMY
U.S. ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON WEST POINT
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IMML-ZA

12 July 2016

U.S. ARMY GARRISON WEST POINT POLICY #37

SUBJECT: Army Energy and Water Management Program

1. REFERENCES:

- a. AR 420-1 Chapter 22, Army Energy and Water Management Program, dated 12 February 2008.
- b. Energy Policy Act of 2005 (EPACT 2005).
- c. Energy Independence and Security Act of 2007 (EISA 2007).
- d. Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management (EO 13423), dated 26 January 2007.
- e. Executive Order 13514, Federal Leadership in Environmental, Energy and Economic Performance (EO 13514), dated 8 October 2009.

2. PURPOSE: This memorandum establishes policy regarding Energy and Water Conservation and Management guidelines for facilities and buildings including electrical plug-in appliances. The measures outlined in this memorandum also support West Point's Electrical Load Reduction Program to reduce summertime peak demand. This policy emphasizes energy saving measures which can be controlled by West Point Soldiers, Family members, employees, contractors and all Department of Defense (DoD) and Non-DoD Organizations, Activities, Agencies, Tenants and partners without decreasing comfort, safety, health and quality of life standards.

3. GENERAL: Department of the Army, Installation Management Command (IMCOM) and United States Army Garrison West Point (USAG WP) supports the EPACT 2005, the EISA 2007, the EO 13423 and EO 13514. These mandates emphasize Command responsibilities within the Energy Management Program and sets goals to be reached by all DoD organizations. This Command must reduce energy consumption by a minimum of 3 percent per year from a 2003 baseline for a total reduction of 30 percent by 2015 and reduce water consumption by a minimum of 2 percent per year from a 2007 baseline with a total reduction of 26 percent by 2020. This Command Policy establishes responsibility for the implementation of an Energy and Water Program with the primary objective to decrease energy and water consumption. Effective

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implementation of this program will reduce energy and water usage, conserve utility dollars and help West Point meet its sustainability goals.

4. POLICY/PROCEDURES: West Point is currently not achieving the annual energy and water reduction goal mandates, so efficient use of energy and water resources is a strategic Command priority. Commanders/Directors are expected to implement an effective Energy and Water Conservation Program In Accordance With (IAW) the current USMA Regulation 11-27, Energy Management Program. The following are some best management practices to help achieve energy and water reduction goals:

a. Commanders/Directors will ensure Building Energy Monitors (BEM) are appointed for each activity's area of responsibility within their location/building. Ensure regular area inspections are conducted in order to eliminate waste during both duty and non-duty hours.

b. The Directorate of Public Works (DPW) and the Installation Energy Manager will continue to assist units through energy use reduction projects and education initiatives.

c. The Garrison Energy Steering Committee (GESC) and the West Point Energy Council (WPEC) serve as the Garrison Commander's Energy Councils. The GESC will review program effectiveness, identify innovative ways to conserve energy and water and provide progress reports to the Commander. The WPEC is the principal organization to advise the Garrison Commander on the integration of Academic, Garrison and community initiatives toward conserving energy resources and greening West Point. Initiatives beyond standard DPW support for West Point will be brought before the WPEC for sharing of ideas and to ensure an integration of efforts.

5. APPLICABILITY: This policy applies to all personnel residing and working at West Point.

6. RESPONSIBILITIES. Commanders/Directors will ensure the following are accomplished:

a. Building Energy Monitor: Ensure that a BEM has been appointed for all buildings the Unit or Organization occupies and for each Activity's area of responsibility within their location/building to include shared common areas with other activities. USMA Energy Regulation 11-27, section I General, paragraph 1-4, b, outlines that building commandants are Building Energy & Water Monitors (BEWM). BEM and BEWM are identical. Activity directors can appoint others within the activity as BEM's to balance workload.

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b. Energy Checklists: Ensure that all BEM's in their organization receive and utilize the Energy Checklists IAW USMA Regulation 11-27. Report all BEM's that are in addition to the building commandant to the DPW Real Property Office.

c. Annual Refresher Training: Ensure all BEM's attend the building commandant training.

d. ENERGY STAR™: Ensure that BEM's enforce procurement and use of only ENERGY STAR™ rated equipment. ENERGY STAR™ compliance is mandated by the Energy Policy Act of 2005 (EA 2005), Energy Independence Security Act of 2007 (EISA 2007) and AR 420-1, Army Facilities Management, dated 12 February 2008. Activity Directors via the BEM, shall ensure that all equipment purchases are ENERGY STAR™ compliant.

e. Computers, Monitors and Peripheral Devices: BEM's shall ensure that users log off and/or re-start their computers and turn monitors and peripheral devices off at the end of each day. Peripheral devices shall be turned off during normal duty hours when not in use. Computers are to be left powered on (hibernated state), as directed by Network Enterprise Center.

f. Classrooms and Conference Rooms: Ensure all unnecessary equipment (Smart Boards, TVs, LCD projectors, etc.) are turned off when not in use. Equipment left on uses electricity and generates heat that results in increased air conditioning loads. Electronics on "standby" mode continue to consume energy; shut them down when not in use.

g. Lighting: Eliminate off-hour and exterior lighting unless necessary for safety and security (AR 190-11), and turn off lights in offices and common areas during off-duty and unoccupied hours. Until occupancy sensors are installed, have procedures in place to ensure lights and equipment get turned off. Instruct BEM's and Building Commandants to submit Demand Maintenance Order (DMO) to install light switches if circuit breakers are currently used to turn lights off. Identify all DMO's as "energy savings".

h. Incandescent Lights: Prohibit lamps and fixtures that have incandescent bulbs from offices, maintenance areas, boiler rooms, closets, etc. Require existing incandescent bulbs to be replaced with Compact Florescent Lamps (CFLs), LED or other Energy Star™-rated lights. Remove all incandescent lights from supply inventories and prohibit the purchase of incandescent replacement bulbs. CFL's and LED's are available by department procurement.

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i. Water Consumption: Direct reduction of water consumption in and outside of buildings. BEM or Building Commandants shall submit DMO's for all leaking fixtures, toilets, urinals, showers, etc. Identify all DMO's as "water saving".

j. Hot Water Temperatures: Ensure hot water temperatures for general domestic uses, administrative areas, or general cleaning do not exceed 110° F at the destination. BEM's and Building Commandants shall submit DMO's for all domestic water systems that do not comply with this requirement that are not locally controlled. Exceptions to the 110° F destination of the following:

(1) Food Handling and Automatic Dish Washing in Food Service Facilities: 140°F. Final rinse for dishes and utensils in all food service applications: 180°F.

(2) Child Care Centers: Hot water temperature in plumbing fixtures used by children in centers must not exceed 110°F with an appropriate range of 80–95°F.

(3) Commercial Type Laundries: 180°F.

(4) Medical: Reference Unified Facility Criteria (UFC) 4–510–01.

k. Windows and Doors: Ensure windows and doors are closed during the heating and cooling seasons. Doors and windows between conditioned spaces and non-conditioned spaces are not to be propped or left open. Remove all door stops from exterior and vestibule doors to prevent them from being open portals during the heating and cooling season. Active management of doors and windows that control conditioned spaces is critical to reducing energy waste. BEM and Building Commandants to submit DMO for all failing doors and windows, including weather-stripping. Identify all DMO's as "energy savings".

l. Supplemental Cooling Devices: Prevent the operation of supplemental cooling devices where the intent is to circumvent the cooling standards outlined below as well as provide cooling to areas not authorized.

Occupied Facilities		
	Occupied Settings	Unoccupied Settings
Heating	68°F	55°F
Cooling	78°F	85°F
Warehouses, Active Working Spaces, Maintenance Bays, etc.		
	Occupied Settings	Unoccupied Settings
Heating	60°F	45°F
Cooling	N/A	N/A

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Window air conditioners are considered supplemental cooling devices. Supplemental cooling devices may be approved for use when the cooling standards cannot be achieved by reasonable adjustments of the primary systems. Supplemental cooling devices may be approved for use if cost-effective energy reductions can be achieved in areas where only a few people occupy a portion of a large building and conditioning is only required in a small section of the facility. Supplemental cooling devices may be approved for temporary use by DPW during cooling system failures or when unconditioned spaces become authorized for cooling as a temporary measure until a permanent system can be designed and installed. All temporary equipment must be removed from service when the cooling system is restored to proper working order. Any requests for supplemental cooling devices shall be submitted through a BEM or building commandant to DPW service desk for approval and shall only be used when the area is occupied. The BEM or building commandant must maintain an inventory of supplemental cooling devices and provide to DPW upon request. All new equipment purchased for supplemental cooling must be Energy Star™ rated.

m. Personal Space Heaters: Prevent the use and authorization of personal space heaters. If the facility heating system is not adequate, the BEM or Building Commandants shall submit a DMO for repairs and or modifications. Per Army Regulations, space heaters are not authorized for use, unless approved by the Fire Department. Space heaters are very inefficient and can be dangerous if not used properly. An approved space heater must be UL or FM approved, contain a tip over switch and not be set on or near combustible materials. Electrical extension cords may not be used with an electric space heater. Remove existing space heaters.

n. Personal Electrical Equipment: Ensure personal electrical equipment and appliances (i.e., fans, coffee pots, tea pots, toaster ovens, etc.) are turned off when not being used and during non-duty hours. Ensure that all personal electrical equipment and appliances meet Energy Star™. Consider replacing all coffee machines with single cup brew systems. All coffee and tea appliances shall be turned off between the hours of 1300 and 1800 during the months of May, June, July, August and September. Encourage shared use of appliances to reduce energy consumption; eliminate where possible.

o. Refrigerators: Prevent the use of personal refrigerators. The use of a personal refrigerator is not authorized for individual work areas. Refrigerators are authorized in work and office areas for shared use with sizing based on number of personnel supported. Use one cubic foot per person as an average to determine size and quantity of refrigerators that are appropriate. Exceptions allowed for General Officers and Commanders who have conference room meeting requirements that justify the single use.

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p. Load Shedding: Assist with load shedding. West Point has instituted an Electric Demand Response Program to shed all unnecessary electric loads during peak demand events (typically occurs in summer months). The following list of actions should be followed as a minimum when an alert is received to reduce the electric load:

- (1) Ensure all coffee and tea appliances are turned off.
- (2) Turn all window air conditioners off.
- (3) Thermostats to be reset to 80°F.
- (4) Unnecessary building lighting to be turned off.
- (5) All indoor/outdoor field lighting to be turned off.
- (6) Ensure all unused office equipment (copiers, printers, monitors, etc.) are turned off.
- (7) Perform building walk-through to ensure unoccupied areas are secured.
- (8) For any questions regarding the Demand Response Program, please contact the DPW Customer Relations Department, at (845) 938-4407.

7. POLICY EXCEPTIONS: Facilities with unique lighting, humidity, heating and cooling requirements may submit requests to the DPW Energy Management Branch.

8. PROPONENT: The proponent for this Policy is the USAG WP and the DPW, Energy Management Branch. This policy memorandum will remain in effect until superseded or rescinded.


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Commanding