

DEPARTMENTAL REGULATION		Number: 5500-001
SUBJECT: USDA Facilities Energy and Water Conservation and Utilities Management	DATE: June 19, 2006	
	OPI: Office of Procurement & Property Management	

1 **PURPOSE**

This regulation establishes the Department of Agriculture (USDA) policy for energy and water conservation and utilities management in USDA facilities in accordance with the requirements of legislation and executive orders, and assigns responsibilities for implementation of this policy. This policy includes guidance on the annual reporting requirements to the Department of Energy (DOE), the Office of Management and Budget (OMB), the Congress and the President.

2 **SPECIAL INSTRUCTIONS**

This regulation is effective upon issuance and shall be implemented pursuant to the National Energy Conservation Policy Act (NECPA), as amended by the Energy Policy Act of 2005 (EPACT); Executive Order 13123, June 1999, Greening the Government through Efficient Energy Management; and Executive Order 13221, July 2001, Energy Efficient Standby Power Devices.

3 **SCOPE**

This regulation applies to all USDA (departmental, agency, and/or staff office) facilities in the United States and its possessions and territories, Puerto Rico, and Northern Mariana Islands as specified below:

- a USDA owned facilities that consume utilities (energy and/or water).
- b Commercially leased facilities where USDA pays directly for utilities.
- c GSA-controlled space assigned to USDA where USDA pays directly for utilities.
- d The facilities that comprise the USDA Headquarters Complex in which USDA is responsible for paying utilities.
- e USDA new facilities construction and/or major renovation projects.

- f Other space assignments, such as Fed-to-Fed, leases executed using delegated authority, or leases obtained under special legislative authority, where USDA pays directly for utilities.

4 EXCLUSIONS

The regulation does not apply to:

- a USDA facilities that have minimal energy usage per square foot (e.g., sheds, outside parking garages, barns that are not climate controlled).
- b USDA leased facilities where the landlord is responsible for paying the utility bills.
- c GSA-controlled space assigned to USDA where USDA does not directly pay for utilities.
- d Shared and/or free space provided to USDA where USDA does not directly pay utility costs.

5 AUTHORITY

This regulation is issued in accordance with 7 CFR Part 2 --DELEGATIONS OF AUTHORITY BY THE SECRETARY OF AGRICULTURE AND GENERAL OFFICERS OF THE DEPARTMENT, SECTION 2.24, DELEGATIONS to the Assistant Secretary for Administration. In accordance with 2.24, the Assistant Secretary for Administration provides program leadership and coordination for USDA's energy conservation and energy efficiency activities, and serves as USDA's principal Energy Conservation Officer, pursuant to Executive Order 13123, Greening the Government Through Efficient Energy Management.

6 BACKGROUND

By both energy legislation and executive orders, the federal government, as the Nation's largest energy consumer, has been assigned responsibility to significantly improve its energy management. With more than 500,000 buildings, the federal government can lead the Nation in energy efficient building design, construction, and operation. As a major consumer of products and services, the federal Government can demonstrate leadership in promoting energy efficiency, water conservation, and the use of renewable energy products. USDA, with more than 25,000 buildings, can make a significant contribution to this effort.

Federal departments are required to implement the energy management policies of existing energy legislation and Executive Order 13123, and report annually on their implementation progress to the Office of Management and Budget, the Congress, and the President through the Department of Energy. Section 301 of Executive Order 13123 states “each agency’s budget submission to the Office of Management and Budget shall specifically request funding necessary to achieve the goals of this order.”

7 DEFINITIONS

- a Advanced Electric Meters (for the purposes of EPACT) are those that have the capability of measuring, recording and communicating data at daily intervals.
- b ASHRAE is the American Society of Heating, Refrigeration, & Air Conditioning Engineers.
- c Covered USDA Facility refers to facilities described in Section 3 of this Regulation.
- d Energy Star Building is a designation and labeling program co-sponsored by the Department of Energy and the Environmental Protection Agency to recognize buildings with energy performance meeting established criteria.
- e Facility means any individual building or collection of buildings, grounds, or structure, as well as any fixture or part thereof, including the associated energy- or water-consuming support systems, which is constructed, renovated, or purchased in whole or in part for use by the Department.
- f GSA-Controlled Facility means a facility under the U.S. General Services Administration’s custody or control.
- g Laboratories for the 21st Century (Labs21) is a program dedicated to the pursuit of sustainable, high-performance, and low-energy laboratories. The program is sponsored by the Department of Energy/Federal Energy Management Program (DOE)(FEMP) and the Environmental Protection Agency (EPA). USDA encourages the agencies to adopt the Labs21 approach for all new and/or rehab projects in its laboratories.
- h Leadership in Energy and Environmental Design (LEED) is a recognized energy rating system for sustainable whole building design and construction. USDA encourages agencies to use the LEED rating system as a tool in managing new construction projects and renovation of existing buildings.

- i Leased Facility means a facility for which USDA has a right of use and occupancy by virtue of having acquired a leasehold interest.
- j New facilities construction and/or major renovation projects are those that start after this departmental regulation takes effect.
- k Owned Facility means a facility for which the title is vested in USDA or which will vest automatically under an existing agreement.
- l Renewable Energy is electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

8 POLICY

The USDA policy is to meet or exceed the goals specified in applicable energy and water conservation laws, regulations and Executive Orders by using life-cycle cost-effective approaches at covered USDA facilities. This policy includes, but is not limited to, the following requirements, in which USDA agencies and staff offices, as applicable, shall:

- a In accordance with the Energy Policy Act of 2005 (EPACT):
 - (1) Achieve EPACT 2005 energy intensity (Btu per gross square foot) mandated reduction goals using FY 2003 as the updated baseline year of measurement. The reduction targets are:

Fiscal Year	Percentage Reduction
2006	2
2007	4
2008	6
2009	8
2010	10
2011	12
2012	14
2013	16
2014	18
2015	20
 - (2) Increase the purchase of electricity from renewable energy sources and/or green power purchases by including provisions for such purchases as a component in all future competitive solicitations for electricity. Specifically, purchase no less than 3% renewable energy each year in FY 2007 through FY 2009; and 5% each year in FY 2010 through

FY 2012; and 7.5 % in 2013 and thereafter.

- (3) Purchase Energy Star® labeled products and FEMP-recommended products. Also, include energy efficient specifications in procurement bids and evaluations.
 - (4) Design buildings to 30% below current ASHRAE standard or International Energy Code if lifecycle cost-effective.
 - (5) Install, to the maximum extent practicable, advanced electric meters at USDA covered facilities, other than those commercially leased, by October 1, 2012. Installation of advanced electric meters shall be conducted in accordance with USDA's Electric Metering Implementation Plan.
- b In accordance with Executive Order 13123:
- (1) Include in the agency budget request each year a specific line item for implementing energy and water efficiency improvements in USDA facilities.
 - (2) Reduce greenhouse gas emissions by 30% by 2010 compared to such emissions levels in 1990.
 - (3) Reduce the use of petroleum by implementing energy-efficient practices and equipment; by switching to a less greenhouse gas-intensive, non-petroleum energy source, such as natural gas or renewable energy sources; by eliminating unnecessary fuel use; or by other appropriate methods.
 - (4) Reduce potable water usage by implementing life cycle cost-effective water efficiency programs that include a water management and not less than four separate Water Efficiency Improvement Best Management Practices (BMPs) published by DOE/FEMP.
- c In accordance with Executive Order 13221:
- Purchase equipment that uses no more than one watt of stand-by power, or if impracticable, purchase items with the lowest standby wattage available.
- d In accordance with USDA policy established herein:
- Apply Energy Star Building Design, and/or Laboratories for the 21st Century (Labs21) approach, and/or design for, at a minimum, a Leadership in Energy and Environmental Design (LEED) Silver rating, as appropriate, in the design and construction or major renovation of USDA covered facilities.

9 RESPONSIBILITIES

- a The Assistant Secretary for Administration (ASA) serves as the USDA principal Energy Conservation Officer under EPACT and the Senior Energy Executive under E.O. 13123, and is responsible for policy, oversight, coordination and reporting on USDA energy and utilities management, as it relates to facilities. The ASA provides Departmental leadership in Government-wide initiatives pertaining to facility energy and water conservation.
- b The Director, OPPM provides program leadership and coordination for USDA's energy conservation and efficiency activities pursuant to E.O. 13123; develops and administers Departmental energy regulations, policies, standards, and guidelines concerning energy and water efficiency in USDA facilities; and coordinates the preparation, review, analysis, and submission of required department level reports to oversight organizations.

The Director, OPPM monitors departmental progress in meeting the goals and requirements of the following:

- (1) Energy Policy Act of 2005 (EPACT)
 - (2) EO 13123: Greening the Government through Efficient Energy Management, 1999
 - (3) EO 13221: Energy Efficient Standby Power Devices, 2001
- c Under Secretaries and Assistant Secretaries shall support and ensure compliance with USDA policies outlined in this regulation and ensure implementation of this regulation at facilities under their control.
 - d Agency Administrators and Staff Office Heads (as applicable) shall support and ensure compliance with USDA policies contained in this regulation, shall implement the provisions of this regulation at each covered facility; and shall:
 - (1) Direct that each covered facility have an Energy and Water Management Plan documented in accord with the requirements described in Appendix A;
 - (2) Identify an Agency Facilities Energy Coordinator to prepare the agency's required annual energy report, implementation plan and scorecard;
 - (3) Attest, in writing, as to the accuracy of the information reported by the agency for inclusion in the USDA Annual Energy Report, Implementation Plan and Scorecard;

- (4) Provide OPPM with supporting documentation verifying the accuracy of energy consumption data and energy implementation activities reported;
 - (5) Ensure that agency facilities energy data is entered into the USDA Corporate Property Automated Information System (CPAIS) as appropriate;
 - (6) Comply with annual reporting deadlines as follows:
The deadline for submission of the Annual Energy Report, Implementation Plan and the Scorecard to OPPM is no later than November 30 each year. This date will facilitate preparation of a comprehensive report from all site locations, which will result in a more complete report from USDA to DOE, OMB, Congress and the President on January 1 each year, as required.
 - (7) Request funds as needed to implement the mandatory energy requirements by including a line item in the agency annual budget request.
- e Agencies shall develop, as applicable, an energy management strategy which will demonstrate the agency's plan for implementing the provisions and achieving the goals of EPACT, EO 13123, and EO 13221. The strategy shall address, but not be limited to: energy and water conservation measures, greenhouse gas reductions, use of renewable energy, on-site energy generation, green power purchases, purchase of equipment with no more than one watt of stand-by power as available, and the installation of advanced electric meters in buildings that are owned by the agency (in accordance with USDA's Electric Metering Implementation Plan).
- f The OCFO (Associate CFO for Financial Systems) has the Information Technology responsibility for the administrative and financial systems which provide the capabilities to generate utility payments and track energy consumption, based upon utility cost information.
- g The Office of Budget and Program Analysis (OBPA) compiles and submits annual agency and departmental budget information required by Office of Management and Budget (OMB) Circular A-11, Exhibit 55, Energy and Transportation Management.

10 REFERENCES

- a Executive Order 13123, Greening the Government Through Efficient Energy Management, directs federal agencies to significantly improve energy management to save taxpayer dollars and reduce emissions that contribute to air pollution. It stresses accountability and leadership by federal agencies to promote energy efficiency, water conservation, use of renewable energy products, and helping to foster markets for emerging technologies.
- b Executive Order 13221, Energy Efficient Standby Power Devices, directs federal agencies to purchase products that use no more than one watt in their standby power consuming mode, if available, or products with the lowest standby power wattage, when purchasing commercially available, off-the-shelf products that use external standby power devices, or that contain an internal standby power function.
- c Public Law 95-619, National Energy Conservation Policy Act (NECPA), 42 U.S.C. 8201, established requirements for life cycle cost analysis and retrofitting of federal buildings.
- d Energy Policy Act of 2005 (EPACT 2005), established federal energy management requirements through FY 2015, reauthorized Energy Savings Performance Contracts (ESPCs) through FY 2016, and added requirements for electric metering in federal buildings by October 1, 2012.
- e 10 CFR Part 434, Energy Code for New Federal Commercial and Multi-family High Rise Residential Buildings; mandatory for federal buildings, requires new federal buildings to meet certain minimum standards.
- f Federal User's Manual, Performance Standards for New Commercial and Multifamily High-Rise Residential Buildings, which explains 10 CFR Part 434 and provides worksheets and summary certification forms to demonstrate compliance.
- g 10 CFR Part 436, Federal Energy Management and Planning Programs, which sets forth the rules for energy management and planning programs to reduce energy consumption and promote life cycle cost-effective investments in building energy systems and energy conservation measures for federal buildings.
- h 41 CFR Subpart 102-74.155, et seq., Energy Conservation, which requires energy-efficient operation of federal buildings.
- i 48 CFR Subpart 970.3770-2, Facilities Management, that describes policy pertaining to compliance with energy management requirements

incorporated into contracts through use of the clause at 48 CFR Subpart 970.5237-2.

- j 48 CFR Chapter 1, Federal Acquisition Regulation (FAR), Part 41, Acquisition of Utility Services, which provides policies and procedures for acquisition of utilities services.
- k FAR Subpart 23.202, which states the federal government's policy is to acquire supplies and services that promote energy and water efficiency, advance the use of renewable energy products, and help foster markets for emerging technologies.
- l Public Law 100-615, Federal Energy Management Improvement Act of 1988, 42 U.S.C. 8251, which amended NECPA to establish the Interagency Energy Management Task Force.
- m USDA Corporate Property Automated Information System (CPAIS) is the official USDA corporate system of record for all USDA owned real property, commercial leased property, and GSA assigned space.

11 ADDITIONAL INFORMATION

Additional information on federal energy requirements and programs, including detailed information on specific energy definitions and topics addressed in the regulation, can be found at OPPM's Facilities Energy webpage at: www.usda.gov/energyandenvironment/facilitiesEnergy/index.htm and at FEMP's webpage at: www.eere.energy.gov/femp.

-END-

APPENDIX A

U.S. DEPARTMENT OF AGRICULTURE ENERGY AND WATER MANAGEMENT PLAN REQUIREMENTS

Agency Energy and Water Management Plans should be integrated with agency overall facility management processes, over the facilities’ entire life cycles. These plans are an integral part of overall real property asset management and utilities management, and can contribute to reduced operating costs. Each USDA agency must have an Energy and Water Management Plan for each of its covered facilities incorporating the components described below.

- 1 Continuous improvement on an annual basis using a life cycle cost-effective approach toward:
 - a Reducing greenhouse gas emissions attributed to facility energy use by 30% by 2010 compared to such emissions levels in 1990.
 - b Reducing facilities energy consumption relative to FY 2003 levels according to the table below:

Fiscal Year	Percentage Reduction
2006	2
2007	4
2008	6
2009	8
2010	10
2011	12
2012	14
2013	16
2014	18
2015	20

- c Implementing water conservation programs which incorporate a minimum of four water efficiency improvement best management practices published by Department of Energy/Federal Energy Management Program (DOE)(FEMP). Agencies should establish targets for implementation of water best management practices at covered facilities so that, to the extent feasible, 100% of such facilities have these best management practices in place by 2010.
- 2 Annual progress of at least 10 percent toward completing energy and water audits of all covered USDA facilities.
- 3 Annual progress toward installing in USDA-owned facilities, all life cycle cost-effective energy and water conservation measures identified by facility audits.
- 4 Annual progress toward qualifying office buildings for the Energy Star® Building label.

- 5 Annual progress toward applying the “Laboratories for the 21st Century” (Labs21) approach for laboratories and designing for a LEED Silver rating (at a minimum) for all new covered USDA facilities.
- 6 Apply sustainable whole building design principles to new facilities. Compliance with 10 CFR 434, Energy Code for New Federal Commercial and Multi-family High Rise Residential Buildings; mandatory for federal buildings, from conceptual design through commissioning. Energy efficiency and sustainable design principles are recommended when designing building alterations.
- 7 Purchase commercially available, off-the-shelf products that use external standby power devices, or that contain an internal standby power function, that use no more than one (1) watt in their standby power consuming mode, if available, or products with the lowest standby power wattage.