

**U.S. Department of Energy**  
**Washington, D.C.**

**ORDER**

**DOE O 430.2**

Approved: 6-13-96  
Sunset Review: 6-13-98  
Expires: 6-13-00

**SUBJECT: IN-HOUSE ENERGY MANAGEMENT**

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1. OBJECTIVES.

- a. To establish Department of Energy (DOE) requirements to cost effectively meet or exceed all Attachment 1 laws, Executive Orders, and Federal regulations for energy efficiency, use of renewable energy, and water conservation at Federal facilities.
- b. To establish requirements that make DOE a model agency for energy efficiency, use of renewable energy, and water conservation.

2. CANCELLATION. DOE 4330.2D, IN-HOUSE ENERGY MANAGEMENT, of 5-18-92.

3. APPLICABILITY.

- a. Departmental Elements. This Order applies to all Departmental Elements responsible for managing DOE facilities. For sites not managed by a contractor, implementation shall occur when the responsible DOE organization has adopted appropriate performance measures.
- b. Contractors. For sites managed by a contractor, requirements of this Order shall be incorporated into existing site operating contracts by contract modification. The requirements shall replace DOE 4330.2D requirements. For sites converting to performance based contracting after the issuance of this Order, this Order shall be implemented through the establishment, by contract, of site-specific performance criteria and a performance measurement system.
- c. Exclusions. Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program, as described in Public Law 98-525 are exempt from the provisions of this Order.

4. REQUIREMENTS. All DOE sites shall have an In-house Energy Management (IHEM) Program and Plan. The program shall, commensurate with the site energy consumption level and potential for cost savings, address but not be limited to the following:

- a. Demonstrate continuous cost-effective improvement on an annual basis toward reducing building energy use per square foot. As a minimum reduce use, as compared to Fiscal Year (FY 1985) levels, by 20 percent in FY 2000, and by 30 percent in FY 2005.

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All Departmental Elements

**INITIATED BY:**

Office of Energy Efficiency  
and Renewable Energy

- b. Demonstrate continuous cost-effective improvement on an annual basis toward increasing energy efficiency in industrial facilities. As a minimum achieve at least a 20 percent increase in energy efficiency in FY 2005 in comparison to FY 1990.
- c. Demonstrate annual progress of at least 10 percent toward completing, by March 8, 2004, Comprehensive Facility Audits of all facilities.
- d. Demonstrate annual progress toward installing, by January 1, 2005, in DOE-owned buildings, all cost-effective energy and water conservation measures identified by Comprehensive Facility Audits.
- e. Implement a system to ensure that the design and construction of new buildings and building alterations comply with Title 10, Code of Federal Regulations, Part 435 (10 CFR 435), Energy Conservation Voluntary Performance Standards for New Buildings; Mandatory for Federal Buildings. For new buildings and building alterations larger than 10,000 square feet, submit Energy Conservation Reports to the Office of Federal Energy Management Programs (FEMP) upon completion of Title I design. Commission new buildings to ensure that the construction meets these requirements before the facility is accepted into the Federal inventory.
- f. To the extent practicable and permitted by law, when entering into, renegotiating or extending leases, identify the energy and water consumption of those facilities and seek to incorporate provisions into each lease that minimize the cost of energy and water under a life-cycle cost analysis, while maintaining or improving occupant health and safety.
- g. Implement a system of surveys and inspections to continuously identify and correct energy conservation deficiencies correctable at low cost. Use surveys/inspections to ensure lighting, heating, ventilating, and air-conditioning systems are operated in accordance with 41 CFR 101-20.107, Energy Conservation.
- h. Minimize use of petroleum-based fuels in DOE-owned buildings and facilities by switching to a less polluting, nonpetroleum-based energy source when cost-effective. For buildings and facilities that use petroleum-based fuel systems, provide dual-fuel capability where cost-effective and practicable.
- i. When cost effective, increase the use of Energy Savings Performance (ESP) contracts and submit to FEMP for coordination of concurrence all ESP solicitations that may require Congressional notification and await approval prior to contract award.
- j. Increase the number of trained energy managers as needed to ensure effective implementation of IHEM requirements.
- k. Significantly increase the use of cost-effective solar and other renewable energy sources.

- l. When appropriate and practical, control electric, gas, and water loads to minimize utility costs. Leverage appropriated funds by participating in innovative financing and contractual mechanisms, including utility Demand-Side Management Programs.
- m. Procure energy efficient and water-saving products, where appropriate. Microcomputers and peripheral equipment shall comply with Executive Order 12845.

5. RESPONSIBILITIES.

a. Office of Federal Energy Management Programs (FEMP).

- (1) Develops DOE policies on energy efficiency, water conservation, and renewable energy at all Federal agencies.
- (2) Develops, implements, monitors, and reports on the DOE IHEM Program.
- (3) Develops, funds, and manages a program of Comprehensive Facility Audits, specialized studies, and retrofit projects to achieve cost effective improvements in energy efficiency and water conservation.
- (4) Prepares and updates the DOE IHEM Plan.
- (5) Develops, in conjunction with the Field Elements the IHEM Program objectives and criteria as the basis for site-specific performance criteria and measures.
- (6) Evaluates the performance of Field Elements against the IHEM Program objectives and criteria.
- (7) Provides technical assistance to the DOE Elements.

b. Cognizant Secretarial Officers.

- (1) Ensure that IHEM initiatives are consistent with planned facility use.
- (2) Ensure that appropriate IHEM performance criteria and measures are included in contracts with sites under their cognizance.

c. Field Elements. Implement the IHEM Program at their sites and report progress toward the requirements of Paragraph 4. Field Elements may reallocate requirements 4a and 4b based on each site's potential to meet the requirements, as long as the Field Element meets the requirements.

- (1) Negotiate IHEM performance criteria and measures with contractors.
- (2) Evaluate, at least annually, the performance of contractors against the IHEM requirements and performance criteria and measures contained in the contract.

6. REFERENCES. See Attachment 1.
7. CONTACT. For information and assistance concerning this Order, call FEMP at 202-586-4535.

BY ORDER OF THE SECRETARY OF ENERGY:



ARCHER L. DURHAM  
Assistant Secretary for  
Human Resources and Administration

CANCELED

### REFERENCES

1. Public Law 94-163, Energy Policy and Conservation Act, 42 USC 6361, which established a Federal Energy Management Program.
2. Public Law 95-619, National Energy Conservation Policy Act (NECPA), 42 USC 8201, which established requirements for life cycle cost analysis and retrofitting of Federal buildings.
3. Public Law 99-272, Omnibus Budget Reconciliation Act of 1985, 42 USC 8287, which amended the NECPA to authorize Federal agencies to enter into Shared Energy Savings contracts.
4. Public Law 100-615, Federal Energy Management Improvement Act of 1988, 42 USC 8251, which amended the NECPA to establish the Interagency Energy Management Task Force.
5. Public Law 102-486, Energy Policy Act of 1992, 42 USC 8262, which amended the NECPA to set Federal energy management requirements through FY 2005, and added water conservation and renewable energy requirements.
6. Executive Order 12845, Requiring Agencies to Purchase Energy Efficient Computer Equipment, of April 21, 1993, which requires all Federal agency acquisitions of microcomputers, including personal computers, monitors, and printers meet the Environmental Protection Agency "Energy Star" requirements for energy efficiency.
7. Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities, of March 8, 1994, which directed Federal agencies to implement energy management requirements of the NECPA, as amended.
8. Title 10, CFR 435, Energy Conservation Voluntary Performance Standards for New Buildings; Mandatory for Federal Buildings, which requires new Federal buildings meet certain minimum standards.
9. Title 10, CFR 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.
10. Title 41, CFR 101-20.107, Energy Conservation, which requires energy efficient operation of Federal buildings.