Energy Policy Act of 2005 - Title I - Energy Efficiency

An Online Continuing Education Course for Engineers

Course Number: BD-4008

Credit: 4 Hours / 4 PDH / 4 CPD

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Introduction

On August 8, 2005 the Energy Policy Act of 2005 was signed into law. The purpose of the Act is to establish a comprehensive energy policy for the United States. The Act is a wide ranging piece of legislation consisting of over 1,700 pages covering a broad spectrum of energy saving and energy production techniques. The insert on the right shows the major chapters of the Act.

Energy Policy Act of 2005

Title	Description
I	Energy Efficiency
II	Renewable Energy
III	Oil & Gas
IV	Coal
V	Indian Energy
VI	Nuclear Energy
VII	Vehicles & Fuel
VIII	Hydrogen Fuel
IX	Research & Development
X	Dept. of Energy Management
XI	Personnel & Training
XII	Electricity
XIII	Energy Policy Tax Incentive
XIV	Miscellaneous
XV	Ethanol & Motor Fuel
XVI	Climate Change
XVII	Innovative Technologies
XVIII	Studies

The Energy Policy Act of 2005 or EPAct'05 has eighteen chapters or titles. Included in the Act are such diverse items as tax incentives for nuclear power plant development and changes in daylight savings time schedules. The Act promotes renewable fuel sources including wind, solar, and tidal power. Alternative fuels such as biofuels are included in the Act as well as other improvements in automobile fuels.

Traditional energy production sources such as oil, gas, coal, and nuclear are considered in the Act. For instance, the Act includes $200 million annually for clean coal initiatives.

There are tax breaks in the Act for almost all segments of the energy markets from tax breaks for oil companies to tax credits for consumers to purchase hybrid vehicles.

In this course we will look at the first title in the Energy Policy Act. Title I concerns energy efficiency and has four sections. The sections are: Federal programs, energy assistance, energy efficient products, and energy efficient public housing.

Title I modifies and expands many existing Federal programs such as the National Energy Conservation Policy Act, The Energy Policy and Conservation Act, The Low-Income Home Energy Assistance Act, and the United States Housing Act, to name a few.

This is essentially a recapitulation of the Act with some of the 'legal' language removed to make the Act slightly more understandable. Some sections have been condensed for clarity and technical corrections to other programs have been removed.

Subtitle A - Federal Programs

Subtitle A of the Title I covers Federal energy efficiency initiatives. It includes energy efficiency in Federal buildings, guidelines for buying energy efficient products, energy reduction goals for Federal buildings, and a calendar change to Daylight savings time.

101. Energy and Water Saving Measures in Congressional Buildings

This section amends the National Energy Conservation Policy Act (42 U.S.C. 8251 et seq.)

The Architect of the Capitol must develop, update, and implement a cost-effective energy conservation and management plan for all facilities administered by Congress to meet the energy performance requirements for Federal buildings and must submit the plan to Congress, within 180 days after the date of enactment of the Act.

The plan must include a description of the life cycle cost analysis used to determine the cost-effectiveness of proposed energy efficiency projects; a schedule of energy surveys to ensure complete surveys of all congressional buildings every five years to determine the cost and payback period of energy and water conservation measures; a strategy for installation of life cycle cost-effective energy and water conservation measures; the results of a study of the costs and benefits of installation of sub-metering in congressional buildings; and information packages and 'how-to' guides that detail simple, cost-effective methods to save energy and taxpayer dollars in the workplace.

The Architect of the Capitol will submit to Congress annually a report on congressional energy management and conservation programs that describes in detail energy expenditures and savings estimates for each facility; energy management and conservation projects; and future priorities to ensure compliance with this section.

102. Energy Management Requirements

The energy consumption per gross square foot of Federal buildings in fiscal years 2006 through 2015 should be reduced as compared with the energy consumption per gross square foot of Federal buildings in fiscal year 2003, by the percentage specified in the following table.

Energy Consumption Reduction Goals Per Square Foot	
Fiscal Year	**Reduction**
2006	2%
2007	4%
2008	6%
2009	8%
2010	10%
2011	12%
2012	14%
2013	16%
2014	18%
2015	20%

The energy reduction goals and baseline established herein supersede all previous goals and baselines and related reporting requirements.

By December 31, 2014, the DOE will review the results of the implementation of the energy performance requirement established and submit to Congress recommendations concerning energy performance requirements for fiscal years 2016 through 2025.

An agency may exclude, from the energy performance requirement for a fiscal year and the energy management requirement any Federal building if the agency finds that,

- Compliance with those requirements would be impracticable.
- The agency has completed and submitted all federally required energy management reports.
- The agency has achieved compliance with the energy efficiency requirements of the Act.
- The agency has implemented all practicable, life cycle cost-effective projects with respect to the Federal building to be excluded.

A finding of impracticability must be based on the energy intensiveness of activities carried out in the Federal building; or the fact that the Federal building is used in the performance of a national security function. Within 180 days after the date of the Act, the DOE will issue guidelines that establish criteria for these exclusions.

An agency may retain any funds appropriated to that agency for energy expenditures, water expenditures, or wastewater treatment expenditures, at buildings that are not made because of energy savings or water savings. Except as otherwise provided by law, such funds may be used only for energy efficiency, water conservation, or unconventional and renewable energy resources projects.

103. Energy Use Measurement and Accountability

By October 1, 2012, in accordance with guidelines established by the DOE all Federal buildings must be metered for the purposes of efficient use of energy and reduction in the cost of electricity used in such buildings. Each agency will use, to the maximum extent practicable, advanced meters or advanced metering devices that provide data at least daily and that measure at least hourly consumption of electricity in the Federal buildings of the agency. Such data will be incorporated into existing Federal energy tracking systems and made available to Federal facility managers.

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Within the DOE a now the ager ing the requirements and dem cumentation, of any finding that advance ering devices are not practicable.

104. Procurement of Energy Efficient Products

Energy Star product means a product that is rated for energy efficiency under an Energy Star program and *Energy Star program* means the program established by the Energy Policy and Conservation Act.