

Department of Energy

§ 436.10

Subpart A—Methodology and Procedures for Life Cycle Cost Analyses

- 436.10 Purpose.
- 436.11 Definitions.
- 436.12 Life cycle cost methodology.
- 436.13 Presuming cost-effectiveness results.
- 436.14 Methodological assumptions.
- 436.15 Formatting cost data.
- 436.16 Establishing non-fuel and non-water cost categories.
- 436.17 Establishing energy or water cost data.
- 436.18 Measuring cost-effectiveness.
- 436.19 Life cycle costs.
- 436.20 Net savings.
- 436.21 Savings-to-investment ratio.
- 436.22 Adjusted internal rate of return.
- 436.23 Estimated simple payback time.
- 436.24 Uncertainty analysis.

Subpart B—Methods and Procedures for Energy Savings Performance Contracting

- 436.30 Purpose and scope.
- 436.31 Definitions.
- 436.32 Qualified contractors lists.
- 436.33 Procedures and methods for contractor selection.
- 436.34 Multiyear contracts.
- 436.35 Standard terms and conditions.
- 436.36 Conditions of payment.
- 436.37 Annual energy audits.
- 436.38 Terminating contracts.

Subparts C-E [Reserved]

Subpart F—Guidelines for General Operations Plans

- 436.100 Purpose and scope.
- 436.101 Definitions.
- 436.102 General operations plan format and content.
- 436.103 Program goal setting.
- 436.104 Energy conservation measures and standards.
- 436.105 Emergency conservation plan.
- 436.106 Reporting requirements.
- 436.107 Review of plan.
- 436.108 Waivers.

APPENDIX A TO PART 436—ENERGY CONSERVATION STANDARDS FOR GENERAL OPERATIONS [RESERVED]

APPENDIX B TO PART 436—GOAL SETTING METHODOLOGY

APPENDIX C TO PART 436—GENERAL OPERATIONS ENERGY CONSERVATION MEASURES

APPENDIX D TO PART 436—ENERGY PROGRAM CONSERVATION ELEMENTS

AUTHORITY: 42 U.S.C. §6361; 42 U.S.C. 8251-8263; 42 U.S.C. 8287-8287c.

SOURCE: 44 FR 60669, Oct. 19, 1979, unless otherwise noted.

§ 436.1 Scope.

This part sets forth the rules for Federal energy management and planning programs to reduce Federal energy consumption and to promote life cycle cost effective investments in building energy systems, building water systems and energy and water conservation measures for Federal buildings.

[61 FR 32649, June 25, 1996]

§ 436.2 General objectives.

The objectives of Federal energy management and planning programs are:

(a) To apply energy conservation measures to, and improve the design for construction of Federal buildings such that the energy consumption per gross square foot of Federal buildings in use during the fiscal year 1995 is at least 10 percent less than the energy consumption per gross square foot in 1985;

(b) To promote the methodology and procedures for conducting life cycle cost analyses of proposed investments in building energy systems, building water systems and energy and water conservation measures;

(c) To promote the use of energy savings performance contracts by Federal agencies for implementation of privately financed investment in building and facility energy conservation measures for existing Federally owned buildings; and

(d) To promote efficient use of energy in all agency operations through general operations plans.

[55 FR 48220, Nov. 20, 1990, as amended at 60 FR 18334, Apr. 10, 1995; 61 FR 32649, June 25, 1996]

Subpart A—Methodology and Procedures for Life Cycle Cost Analyses

SOURCE: 55 FR 48220, Nov. 20, 1990, unless otherwise noted.

§ 436.10 Purpose.

This subpart establishes a methodology and procedures for estimating and comparing the life cycle costs of Federal buildings, for determining the life cycle cost effectiveness of energy

conservation measures and water conservation measures, and for rank ordering life cycle cost effective measures in order to design a new Federal building or to retrofit an existing Federal building. It also establishes the method by which efficiency shall be considered when entering into or renewing leases of Federal building space.

[61 FR 32649, June 25, 1996]

§ 436.11 Definitions.

As used in this subpart—

Base Year means the fiscal year in which a life cycle cost analysis is conducted.

Building energy system means an energy conservation measure or any portion of the structure of a building or any mechanical, electrical, or other functional system supporting the building, the nature or selection of which for a new building influences significantly the cost of energy consumed.

Building water system means a water conservation measure or any portion of the structure of a building or any mechanical, electrical, or other functional system supporting the building, the nature or selection of which for a new building influences significantly the cost of water consumed.

Component price means any variable sub-element of the total charge for a fuel or energy or water, including but not limited to such charges as “demand charges,” “off-peak charges” and “seasonal charges.”

Demand charge means that portion of the charge for electric service based upon the plant and equipment costs associated with supplying the electricity consumed.

DOE means Department of Energy.

Energy conservation measures means measures that are applied to an existing Federal building that improve energy efficiency and are life cycle cost effective and that involve energy conservation, cogeneration facilities, renewable energy sources, improvements in operation and maintenance efficiencies, or retrofit activities.

Federal agency means “agency” as defined by 5 U.S.C. 551(1).

Federal building means an energy or water conservation measure or any building, structure, or facility, or part thereof, including the associated en-

ergy and water consuming support systems, which is constructed, renovated, leased, or purchased in whole or in part for use by the Federal government. This term also means a collection of such buildings, structures, or facilities and the energy and water consuming support systems for such collection.

Investment costs means the initial costs of design, engineering, purchase, construction, and installation exclusive of sunk costs.

Life cycle cost means the total cost of owning, operating and maintaining a building over its useful life (including its fuel and water, energy, labor, and replacement components), determined on the basis of a systematic evaluation and comparison of alternative building systems, except that in the case of leased buildings, the life cycle cost shall be calculated over the effective remaining term of the lease.

Non-fuel operation and maintenance costs means material and labor cost for routine upkeep, repair and operation exclusive of energy cost.

Non-recurring costs means costs that are not uniformly incurred annually over the study period.

Non-water operation and maintenance costs mean material and labor cost for routine upkeep, repair and operation exclusive of water cost.

Recurring costs means future costs that are incurred uniformly and annually over the study period.

Replacement costs mean future cost to replace a building energy system or building water system, an energy or water conservation measure, or any component thereof.

Retrofit means installation of a building energy system or building water system alternative in an existing Federal building.

Salvage value means the value of any building energy system or building water system removed or replaced during the study period, or recovered through resale or remaining at the end of the study period.

Study period means the time period covered by a life cycle cost analysis.

Sunk costs means costs incurred prior to the time at which the life cycle cost analysis occurs.

Time-of-day rate means the charge for service during periods of the day based