

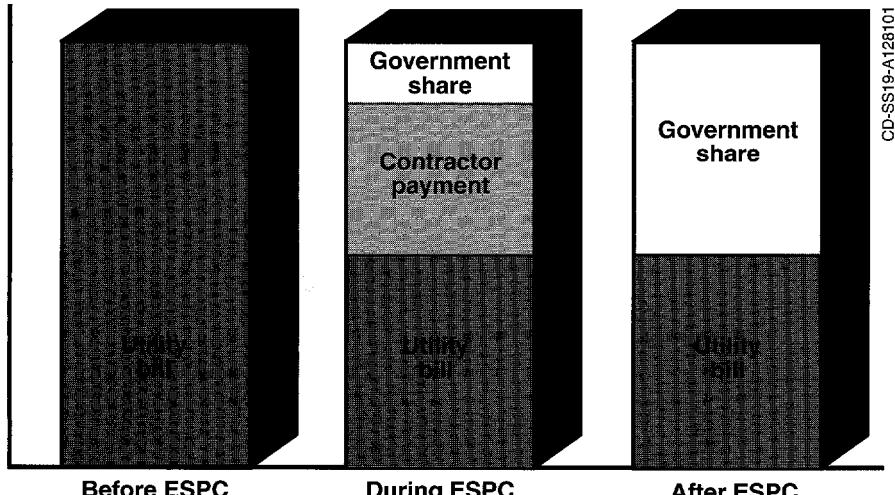
# What's New in Federal Energy Management

## Program Overview



### Energy Savings Performance Contracting reallocates the utility bill to:

- Pay a lower utility bill
- Pay the contractor
- Achieve cost savings for the government



# MASTER

## Energy Savings Performance Contracting

*Alternative financing funds energy efficiency improvements in federal buildings*

The Energy Policy Act of 1992 (EPAct) and Executive Order 12902 require that Federal agencies reduce the energy consumed in Federal buildings. The order increased the goal to 30% by 2005, when compared with 1985. Energy Savings Performance Contracting (ESPC) offers a means of achieving this energy reduction goal at no capital cost to the government.

ESPC, formerly known as Shared Energy Savings Contracting, is an alternative to the traditional method of financing energy efficiency improvements in Federal buildings, which is through Federal appropriation of capital funds. Under this alternative

financing arrangement, Federal agencies contract with energy-service companies, which pay all the up-front costs. These costs include identifying building energy requirements and acquiring, installing, operating, and maintaining the energy-efficient equipment. In exchange, the contractor receives a share of the cost savings resulting from these improvements until the contract period expires, which can be up to 25 years. At that time, the Federal government retains all the savings and equipment.

The key benefits of ESPC are that it

- Reduces energy costs
- Improves Federal energy efficiency and helps meet the Federal energy savings requirements
- Eliminates the maintenance and repair costs of aging or obsolete energy-consuming equipment
- Places the operations and maintenance responsibilities on the contractor
- Stimulates the economy by allowing energy-service companies to profit from their up-front investments in federally owned buildings by receiving a share of the utility bill savings.

The contractor also provides for training government personnel and measuring energy savings. Several Federal agencies have successfully awarded these unique contracts.

### What are energy cost savings?

Energy cost savings refer to a reduction in the cost of energy used in Federally owned buildings. The contract sets forth the methodology for establishing the base cost and the share of energy cost savings each year. The contract also specifies the method of determining the value of such savings, which may vary from year to year.

Energy cost savings may result from the lease or purchase of operating equipment, improvements, altered operations and maintenance, or technical services. Savings may also result from using cogeneration or heat recovery to improve the efficiency of existing energy sources.

### When can ESPC be used?

ESPC allows Federal agencies to update aging building systems, streamline operations, and train maintenance workers to reduce operating costs. ESPC can be used when:

- Updating aging equipment with newer, more efficient products
- Helping agencies meet the energy cost reduction goals of Executive Order 12902 and EPAct
- Conserving nonrenewable fuels and achieving environmental benefits by reducing energy consumption
- Reducing utility costs without sacrificing service.

Agencies can use future energy savings to fund projects, freeing up money currently wasted on energy inefficiency and making it available for facility improvements and sustained maintenance.

### What is DOE doing to support agency ESPC projects?

EPAct directed DOE to develop methods and procedures to bring ESPC into the mainstream of Federal procurement. An ESPC regulation detailing the methods and procedures was published at 10 CFR 436. The regulation establishes a qualified list of energy service companies and identifies the methods and procedures for contractor selection. It also allows Federal agencies to enter into ESPCs for up to 25 years without funding of cancellation charges, permits contract payments from funds for energy and related operation and maintenance expenses, and requires annual energy audits to verify guaranteed cost savings.

DOE's Federal Energy Management Program (FEMP) developed model procurement documents; the *Measurement and Verification Guideline for Federal Energy Projects*; a how-to manual for ESPCs; a home page on the Internet; and educational videos for

management, legal, and contracting personnel. In addition, FEMP is developing training videos to assist agency personnel in preparing site-specific ESPCs. Also available on videotape is a May 1996 TeleFEMP satellite broadcast of a panel discussion on ESPC and other alternative financing approaches. All videotapes are available through the FEMP Help Desk.

To help streamline the contracting process, DOE issued a solicitation for its first FEMP Energy Saver Performance Contract ("Super ESPC"). DOE plans to issue several Super ESPCs that will cover the remainder of its six regions. There are also plans to issue Super ESPCs for specific energy conservation technologies. The streamlined process allows Federal agencies to issue orders off of each contract and begin to realize energy cost savings more quickly. Demands on agency resources to develop contracts should be reduced, allowing agencies to use their valuable and scarce resources on other priorities.

Because ESP contracts depend on proper measurement and verification of promised energy savings, FEMP supported the development of a collaborative effort to produce a consensus document for measuring and verifying energy savings that Federal energy managers, procurement officials, and private sector energy services providers could use. DOE developed the North American Measurement and Verification Protocol and as the first application, FEMP issued the *Measurement and Verification Guideline for Federal Energy Projects*. The new FEMP guideline speaks the "Federal" language and provides standard procedures for quantifying savings from the installation of energy conservation measures. Intended for use in ESP contracts, the FEMP guideline provides the methodology for establishing cost savings called for in the ESPC regulation.

FEMP offers agencies two workshops on ESPCs. The first workshop provides agencies with the information they need to participate in a Super ESPC. The second workshop is customized to assist agencies in preparing their own site-specific project, preparing an agency Super ESPC, or reviewing

other alternative financing options. The workshops are targeted to Federal employees who want to learn how to execute successful energy projects using any ESPC approach. Participants should be from any of the engineering, operations, contracts, legal, or budget organizations of those facilities that can benefit from energy conservation retrofits. Maximum benefit can be attained if technical and contracting personnel attend the workshops.

For the private sector, FEMP offers a seminar that gives attendees a general idea of how the government purchases energy conservation services through ESPC. An overview of FEMP's model solicitation and the Super ESPC are covered. In addition, the seminar reviews proposal submittal requirements and source selection evaluation processes.



### For More Information

FEMP Help Desk:  
(800) DOE-EREC (363-3732)  
Internet: <http://www.eren.doe.gov/femp>

Tanya Sadler, ESPC Program Manager  
(202) 586-7755  
Fax (202) 586-3000  
Mark Ginsberg, Director  
Federal Energy Management  
Program, EE-90  
U.S. Department of Energy  
1000 Independence Ave., SW  
Washington, DC 20585

12/30/96  
9/23/96 (1)



Produced for the U.S. Department of Energy (DOE) by the National Renewable Energy Laboratory, a DOE national laboratory

A revision of DOE/GO-10093-286 Rev.1  
DOE/GO10096-293  
DE96013068  
August 1996



Printed with a renewable-source ink on  
paper containing at least 50% wastepaper,  
including 20% postconsumer waste

## **DISCLAIMER**

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

#### **DISCLAIMER**

**Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.**