

**ENERGY EFFICIENCY WORKING GROUP (EEWG)
CY 02 ANNUAL REPORT TO THE DIRECTORS
January 24, 2003**

Purpose

EEWG is a working committee of energy management professionals from various DOE/HQ, field, operations and support offices, national laboratories and M&O contractors throughout the DOE complex.

Our goal is to promote excellence in energy management through the active exchange of management and technical information, timely and effective communication, and facilitate the application of information and techniques.

Key vehicles we use to further this goal are periodic working meetings. We normally conduct working meetings twice a year lasting 1-2 days each. We encourage DOE/HQ and local DOE office attendance at each working meetings. We don't require EFCOG membership to attend our working meetings. Interested energy management professionals from other federal agencies and organizations are welcome to participate. There is no fee for working meeting participants. Working meetings are normally scheduled to coincide with other energy related conferences and technical seminars. This strategy leverages the limited travel budgets of members and participants.

Membership

Primary sponsor:

DOE's Federal Energy Management Program (FEMP)
Elizabeth Shearer, FEMP Director
Vic Petrolati, DOE's Energy Management Team Leader

Executive Sponsor: Don Pearman, Bechtel SAIC

EEWG Chair: Mike Holda, LBNL

EEWG Steering Committee:

James Hedin, WIPP
Wilson Reynolds, Energy Management Engineering
Carter Ward, Energy Information Systems
Vic Petrolati, DOE's Energy Management Team Leader
Mike Moran, PNNL
Tom Brand, DOE/OAK
Dale Sartor, LBNL
Ernie Fossum, INEEL
Blair Horst, LLNL
Otto Van Geet, NREL

Over 50 members and regular participants representing national laboratories, M&O contractors, energy management firms, DOE/HQ, field, operations and support offices.

Status

Over the past year the primary focus of the working group has been on issues associated with the development and implementation of sustainable and energy efficient design practices at DOE facilities.

Some of the goals of the working group have been to support DOE/HQ and site energy coordinators:

1. Increase the number of DOE sites that participate in departmental energy management program funding initiatives and have active energy management programs
2. Help implement the new DOE Order 430.2a including:
 - a. Implementing water efficiency programs, plans and best management practices
 - b. Selection of DOE/EPA energy star products
 - c. Strategies for reducing energy consumption in Laboratory and Industrial Facilities
 - d. Increased use of off-grid generation systems including renewable energy systems

Noteworthy accomplishments at DOE sites required DOE Order 430.2a will be presented at our February 2003 EEWG meeting.

3. Develop Best Management Practices through the Departmental Model Programs initiative including:
 - a. Energy Star Labels in DOE Office Buildings
 - b. Sustainable Design Initiatives at DOE sites
 - c. DOE Building Recommissioning efforts
 - d. ESPCs in Excess Facilities

These model programs provided a springboard for the introduction of best practices in energy management at DOE facilities. Presentations of the progress and results of these model programs at DOE sites were included at the June 2002 EEWG meeting.

4. Integrate EEWG with other EFCOG Working Groups

The Chairs of the EFCOG Maintenance, Engineering Standards and ISM Environmental subgroup will speak on related activities/initiatives at our February 2003 EEWG meeting. The intent is to exchange information, share common goals, and leverage synergies between the working groups and their members

DOE continues to experience an accelerating loss of talented energy efficiency professionals at sites and operations offices due to limited direct appropriations.

EEWG continues to provide assistance DOE and other federal agencies in securing private sector financing to fund energy efficiency and infrastructure improvement projects at their facilities using innovative financing mechanisms. EEWG is providing support to Energy Savings Performance Contracting (ESPC) and Utility Energy Services Contracts (UESC) by utilizing the pool of the energy efficiency expertise that exists at the national laboratories to assist DOE and other federal agency sites to develop and implement projects utilizing these innovative procurement vehicles. Most energy projects at DOE sites are now funded using private sector financing.

The following is a list DOE sites which have developed or are in the process of developing Energy Savings Performance Contracts and Utility Energy Services Contracts that have benefited as a result of information and lessons learned shared through EEWG over the past year:

Idaho National Engineering and Environmental Laboratory
Argonne National Laboratory
Pantex Plant
Y-12 Plant
Nevada Operations Office
Fermi National Accelerator Laboratory
Hanford
Savannah River Site
Oak Ridge National Laboratory
National Energy Technology Laboratory

According to DOE, EEWG has been instrumental in accelerating the process, directly associated with the number of alternatively financed projects within the Department of Energy and a substantial portion of the savings associated with these efforts is directly attributable to EEWG.

Summary of other Energy Efficiency Working Group (EEWG) activities during CY2002:

EEWG meeting January 10-11, 2002 held in conjunction with the DOE and EPA Sponsored Laboratories of the 21st Century Conference in Washington, DC. Agenda included Leadership in Energy and Environmental Design (LEED) Green Building rating system and it's application at DOE sites, status update on DOE Order 430.2, the low energy, high efficiency "Berkeley Fume Hood" under development at LBNL, FEMP/HQ update, best practices roundtable on energy performance metrics, building recommissioning, group lighting relamping, and energy equipment inventory management, and a discussion on coordination of DOE/HQ program infrastructure budgets with DOE site energy managers. Thirty one (31) attendees from DOE/HQ, field offices and laboratory sites participated in the discussions. The meeting summary is posted on the EFCOG/EEWG website.

EEWG meeting June 6, 2002 held in conjunction with Energy 2002 Conference and Expo. The meeting was well attended. Approximately 45 attendees representing DOE/HQ, field and operations offices, and site energy managers.

Agenda included:

Federal Energy Management Program HQ/Update

Overview of PNNL's Energy Management Program

Presentations on Departmental Energy Management funded Model Programs including:

- Sustainable Building Design Initiatives
- Building Recommissioning
- ESPC's in Excess facilities
- Energy Star Building Labels at DOE Offices Buildings

DOE Order 430.2a -Departmental Energy and Utilities Management

Meeting agenda, notes, presentations and attendees are posted on the EEWG/EFCOG website.

We are also utilizing the EFCOG/EEWG website to post applicable DOE directives, publications, working group meeting information, and energy related conferences and technical seminars.

CY2003 Plans

Our next EFCOG/EEWG meeting is scheduled for February 4-6, 2003 at the National Renewable Energy Laboratory (NREL) in Golden, CO.

The meeting will be held in conjunction with a Building Commissioning Training Course. The focus of the commissioning training will be on laboratories and retro-commissioning.

EEWG meeting discussion topics include:

- Presentations by related EFCOG Working Groups including Maintenance, Engineering Standards, and ISM Environmental Subgroup
- EPA Climate Leaders Program
- DOE FEMP/HQ update
- ANL New Bldg LEED Certification
- Utility Energy Services Contracts update
- NREL's Site Energy Management Program
- DOE Order 430.2a site implementation progress update: noteworthy accomplishments required by order including:

1. Water efficiency programs, plans and best management practices
2. DOE/EPA energy star product selection
3. Laboratory/Industrial Facilities Energy reduction strategies
4. Increased use of off-grid generation/renewables

-Roundtable discussion- success stories, issues, lessons learned

We also plan to have an EEWG meeting August 21, 2003 in conjunction with Energy 2003 in Orlando, FL. The agenda for the meeting has not yet been developed.

Participate in a Federal Laboratory Forum August 20, 2003. The intent of the Forum is to encourage federal laboratories to work together to increase environmental performance of their facilities.

Continue to support and participate in Laboratories of the 21st Century. Next annual conference scheduled for October 21-23, 2003 in Denver, CO.

Travel restrictions are expected to continue to impact participation in working meetings. We will attempt to video conference/tape future working meetings when practical.

In CY 2003 we will continue to assist DOE FEMP with marketing and implementation of alternative financing mechanisms for energy efficiency and infrastructure improvements projects at DOE sites.

We will continue to interact with representatives from other EFCOG Working Groups exchange information, share common goals, and to take advantage of synergies between the working groups and their members

EEWG will also continue to take a comprehensive customer focused approach responsive to FEMP's vision to assist DOE and federal agency sites increase energy efficiency, conserve water, promote renewable energy technology use and manage energy costs.

EEWG will continue to assist DOE's Federal Energy Management Program with timely and effective communication between sites, field and operations offices and HQ.

We will also continue to increase communication and participation of energy management professionals from DOE, other federal agencies and other appropriate EFCOG working groups at workshops to extend the pool of knowledge available to support DOE's energy management initiatives.

In CY 03 we will work with DOE's Office of Energy Efficiency and Renewable Energy (EERE) to explore the potential of increasing the scope of EEWG to include applicable EERE technology initiatives.

Recommendations

Recommend that the Energy Efficiency Working Group (EEWG) be continued.
No subgroups are recommended to be formed at this time.