

**ENERGY EFFICIENCY WORKING GROUP (EEWG)
ANNUAL REPORT TO THE DIRECTORS
(CY 2004)**

Introduction

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 once or twice a year lasting 1-2 days. We encourage DOE/HQ and local DOE office attendance at each working group meeting. We do not require EFCOG membership to attend our working meetings. Interested energy management professionals from other federal agencies and organizations are welcome and encouraged 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)

Schuyler Schell, FEMP Director

Vic Petrolati, DOE's Energy Management Team Leader

Executive Sponsor: Roby Enge, PNNL

EEWG Chair: Mike Moran, PNNL

EEWG Steering Committee:

Cheryl O'Brien, INL

Mike Holda, LBNL

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, INL

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.

Objectives and Achievements

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 and best 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. Continue implementation of 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
3. Develop and/or work to establish Best Management Practices through the Departmental Model Programs initiative including:
 - Recommissioning (for both new and current facilities); Sustainable Design for new facilities
 - Acquiring Energy Star Labels for DOE Office Buildings
 - Expanding the use of private sector financing for DOE Facilities
 - Water Management Plans and accomplishment of best practices
 - Expanding the purchase of Energy Star Products
 - Replacing chillers using ozone depleting substances.

These model programs provide a springboard for the introduction of best practices in energy management at DOE facilities. Presentations of the progress and results of these and other topics were included at the August 2004 EEWG meeting in Rochester, NY.

4. Integrate EEWG with other EFCOG Working Groups. The Chairs of the EFCOG Maintenance, Engineering Standards and ISM Environmental subgroup have shared information with us the EEWG on related activities/initiatives and will continue to identify opportunities that would be of benefit to each Working Group and EFCOG members. The intent is to continue to exchange information, share common goals, and leverage synergies between the working groups and their members.

Summary of other Energy Efficiency Working Group (EEWG) activities during CY2004:

DOE continues to experience an accelerating loss of talented energy efficiency professionals at sites and operations offices due to limited direct appropriations. This was clearly demonstrated in CY2004 when a planned EEWG meeting scheduled to be held at the Pacific Northwest National Laboratory was cancelled because of a shortage in registrations and funding for members to attend. A teleconference was scheduled in its place with excellent participation from the members.

The EEWG held three teleconferences in CY2004 (February, May, October). All teleconferences included: DOE HQ updates, EFCOG updates, status of subgroup progress regarding publishing a BMP, energy topics/hot items and open forum membership roundtables. Participation was solid for each call, with never fewer than 21 callers and a high of 35.

The annual EEWG meeting was held August 12, 2004 in conjunction with the Energy 2004 Conference in Rochester, NY. The meeting attendance was above last years numbers with 35 all day participants and additional visitors/vendors throughout the day. The agenda included Federal Energy Management Program HQ/Update, energy and water audits at LLNL, retro-commissioning at ANL, sustainable design interest group progress report, LEED at NREL and ORNL, a presentation by a private company WebGen Systems – intelligent use of energy and building cost and performance measurement data from PNNL. The meeting summary/agenda is posted on the EFCOG/EEWG website.

The Sustainable Design Interest Group which, was formed in CY03 published the first EEWG Best Practice in CY2004. It is titled “Template for Sustainable Design Standards Guide”. The publication of this BMP was led by the EEWG Vice-Chair, Cheryl O’Brien of the INL and a host of other EEWG members representing six DOE National Laboratories. They did a great job on the document.

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.

CY2005 Plans

The EEWG will continue in CY05 focusing on:

- publishing at least three Best Management Practices in the energy and water conservation areas
- selection of topics and speakers to present at the annual CY2005 EEWG meeting
- review Sustainable Design "Best Practices" for DOE facilities
- suggestions to revisions of DOE 430.2a.

The EEWG will have scheduled teleconference meetings in January, March, June and November of CY2005.

Our next EFCOG/EEWG meeting is scheduled for August at the end of Energy 2005 in Long Beach, Ca. The focus of the meeting will include:

- Presentation by a related EFCOG Working Group (TBD) e.g; Maintenance, Engineering Standards, or ISM Environmental Subgroup
- DOE FEMP/HQ update
- Presentation on EEWG CY2005 BMP publications
- Presentation/display from a vendor on new technologies in the energy efficiency field
- 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

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

In CY 2005 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.

Recommendations

Recommend that the Energy Efficiency Working Group (EEWG) be continued.