



ASSOCIATION OF
ENERGY ENGINEERS

Bay Area Chapter

NEWSLETTER

November 2003

Meeting Information Tuesday, November 25, 2003

AEE Bay Area Chapter Presents

“Annual Awards Dinner and Brewery Tour”

5:30 – 6:15 p.m.

Tour of Brewery

6:15 – 7:00 p.m.

Social

7:00 –9:00 p.m.

Dinner and Chapter Awards

Location:

Pyramid Alehouse
Berkeley

Cost:

\$35 Members
\$40 Non-Members
\$15 Students

Reservations:

Please make reservations one of the following ways:
Email Bruce Chamberlain at bruce@energy-solution.com, call Bruce at (510) 482-4420 ext 227, fax (510) 482-4421 using the handy FAX form, or respond at our chapter website www.aee-sf.org. Please make your reservations by noon Friday, November 21.

President’s Message Cont.

Every year we take the final meeting of the year to recognize a few of the people that have made a notable contribution to energy efficiency and energy policy. First I want to congratulate all 2003 AEE Bay Area Chapter Awardees for their outstanding achievements and contribution. I also would like to encourage you to join us on November 25th at the Berkeley Pyramid Brewery to congratulate them in person and learn more about their specific contribution.

- Karl Brown – Energy Engineer of the Year
California Institute for Energy Efficiency
- Mark Levy – Energy Manager of the Year
General Services Administration
- Mike Rufo – Energy Policy Advocate
Quantum Consulting
- Ed Smeloff – Public Utility Manager of the Year
S.F. Public Utilities Commission
- Virginia Waik – AEE Champion
City of Palo Alto Utilities
- PowerLight Corp. – Corporate Achievement Award
- East Bay MUD – Alternative Energy Champion

It has been an honor and a privilege to be of service as this year’s president. I want to thank the 2003 Board of Directors for their support and service as well as the many presenters that have taken the time to share their experiences with us. I also want to give special thanks to the Pacific Energy Center for sponsoring many of our events this year.

Thanks for your time. I look forward to seeing you on the 25th and at future events. Please let us know if there is any way we could be of service. Thank you.

Rory Moran
AEE Bay Area President

President’s Message

This is typically the final newsletter of the year and my last opportunity to talk with you before our new president takes over. This has been another great year for our Bay Area Chapter thanks to a lot of hard work from many people.

2003 Board

President – Rory Moran
(925) 437-2718

Senior Vice President – Bruce Chamberlain
(510) 482-4420 ext 227

Vice President – Raj Daswani
(415) 957-9445

Co-Secretary – John Clark
(510) 531-6107

Co-Secretary – Patrick Cave
(510) 530-5507

Treasurer – Steve Greenberg
(925) 486-6971

Membership – Stan Boghosian
(510) 845-7468

Newsletter – Leslie Kramer
(415) 434-0900 ext. 146

Website Manager – Jim Kelsey
(510) 834-6420

Database Manager – Ed Spivey
(925) 299-8983

Community Involvement – Mark Kutchi
(650) 874-7280

Scholarships and Awards – Brian Estadt
(510) 521-5586

Member At Large - Open

Interested in involvement?
Contact: Rory Moran
(510) 420-8987

Corporate Sponsors

A special thanks to our Corporate Members. If you were a corporate member, you could have your card advertised (and on the web site too).



NORESKO
100 Produce Avenue, Suite
So. San Francisco, CA

888-667-
www noresc .co



Newcom Anderson
50 St., Suite
San Francisco, CA

www newcombanderso .co



SCHILLER ASSOCIATES
PROJECT MANAGEMENT
AND ENGINEERING

www.schiller.com
E-mail: steves@schiller.com
Phone: 510-444-6500
Fax: 510-444-6502

Energy ETC. Inc. Smart Systems...
Smart Future

Engineering, Training,
Consulting CSL-#749992

Robert M. Wallace

22779 Rancho Palomares Pl.
Castro Valley, CA 94552-5408
Ph: 510-581-4899 Fax: 510-583-0926
e-mail: r_wallace@energyetc.com



1626 Holmes St., Livermore, CA 94550 • enaenergy@aol.com
(925) 447-1140 • Fax (925) 447-1706

1993 AEE International Energy Engineer of the Year

Energy Conservation And HVAC Problem Solving
"We Make Buildings Work" – Since 1981

Lori Fillman Brown
Project Development

99 Linden Street
Oakland, CA 94607
510-865-8235 TEL
510-663-2080 FAX
lbrown@RumseyEngineers.com
www.RumseyEngineers.com



ENERGY EFFICIENT DESIGN

kw ENGINEERING



focus on energy

360 17th Street, Suite 100
Oakland, CA 94612
tel 510.834.6420
fax 510.663.3706
www.kw-engineering.com



Cathi McDade
Owens Corning
530 749-9642
cathi.mcdade@owenscorning.com



Affiliated Engineers W, Inc.

Randall J. Zumwalt, CEM
Project Manager

www.aeieng.com

2700 Ygnacio Valley Road
Suite 170
Walnut Creek, CA 94598
Tel 925.933.8400
Fax 925.933.8401
Mobile 925.784.1439
rzumwalt@aeieng.com



**Capturing Wasted Energy
Savings
for Facility Improvements**

ENERGY SAVINGS PERFORMANCE
CONTRACTING

1330 Broadway, Oakland CA 94612
510-464-2973

- equipment type and manufacturer
- construction method
- savings monitoring and guarantees
- subcontractor selection

Headquarters: 12980 Poster Drive, #400
Overland Park, KS 66213 800.475.3500

BASE

BASE Energy, Inc.
5 THIRD STREET, SUITE 530
San Francisco, CA 94103
(415) 543-1600

base@baseco.com, www.baseco.com

Experts in Energy Efficiency for Industrial Facilities
WE REDUCE MANUFACTURING COSTS

Secretary's Report

On October 23rd, the AEE joined COTE and the USGBC for a tour of San Francisco's Moscone Center energy efficiency and photovoltaic (PV) upgrade project. The meeting started with a tour of the PV and efficiency sites at the Moscone Center, and finished at PG&E's Pacific Energy Center (PEC).

The first presenter at the PEC was Fred Schwartz, Manager of Renewable and Advanced Generation for the San Francisco Public Utilities Commission (SFPUC). He talked about the City's goal to transform San Francisco into a large municipal generator of solar power and other renewable energy. He also talked about the economics of the project and the permitting process. Wally McQuat, a consultant to the city for the project, talked about alternatives for financing PV's for municipal projects. The third speaker was Gary Oto, Water and Power Resource Manager for the SFPUC, who discussed the energy efficiency upgrade portion of the project.

Here are several notes about the presentation. More information on the project economics can be obtained at www.votesolar.org/moscone.html.

- The project was paid for by SF municipal revenue bonds, approved in a bond measure by SF voters specifically for solar, wind, and efficiency projects.
- Powerlight Corp. of Berkeley was the prime contractor for both the solar and conservation parts of the project. They designed both the solar system and the lighting upgrades.
- Installed electricity cost for the PV part of the project would have been about \$0.20/kWh. The lighting conservation combined with the PV portion brought the total cost of power for the project to about \$0.14/kWh. This was necessary in order to make the project conform to the bond measure requirement that the cost of power for any project be no greater than the E20 rate.
- Solar array. Size: 675 kW. Cost: \$4.2 million. Energy generated: 825,000 kWh/year.
- Energy efficiency: A portion of the Moscone Center's incandescent and other older lighting was upgraded to more energy efficient models such as T-5 and metal halide lighting fixtures. Also, Moscone's energy management systems was better optimized by adding and upgrading sensors and upgrading some of its software. Cost: \$3.2 million. Annual energy savings: 4.5 million kWh/year.

Submitted by Stan Boghosian.



AEE Bay Area Chapter serves as a unique forum for the discussion of energy issues and concerns. AEE Bay Area Chapter provides common professional meeting ground for facility managers, design and specifying engineers, utility and vendor representatives and energy researchers to participate in vigorous peer-to-peer dialogue, learning and group discussion.

AEE Bay Area Chapter strives to provide quality professional development opportunities that build knowledge and skills through meetings, seminars and publications. Emphasis is placed on:

- Assessing the applicability of emerging technologies, and
- Improving the performance and reliability of current technologies.

Meetings are typically held on the fourth Tuesday of the month. All interested persons are welcome to attend, participate and join the Chapter. If you are interested in joining the AEE Bay Area Chapter, you can contact Stan Boghosian at (510) 845-7468, or you can directly download a mail-in membership application from the AEE website at: <http://www.aee-sf.org/form.rtf> or <http://www.aee-sf.org/form.doc>

Do you know someone who might be interested in joining AEE Bay Area Chapter?

The benefits of joining include:

- Participating in exciting and informative programs
- Receiving a monthly newsletter containing information on meetings, events, and job openings
- Communicating with other energy professionals

For membership application:
**Contact Stan Boghosian
(510) 845-7468.**

Membership applications may be downloaded from the AEE website at:

<http://www.aee-sf.org/form.rtf>
or
<http://www.aee-sf.org/form.doc>

Meetings are held on the fourth Tuesday of each month. All interested persons are welcome to attend, participate and join.



65 Battery Street, Suite 200
San Francisco, CA 94111