



Association of Energy Engineers Southern California Chapter

AEE SoCal 2011 Award Ceremony

Awards Committee

Jack Rosenthal, Chairmen Awards Committee, Honeywell, Energy Auditor

Michael Duncan, VA Hospital, Energy Manager

John Beck, Eaton Energy Solutions, Western Regional Marketing Manager



Southern California Energy Engineer of the Year

Energy Engineer of the Year

Presented for outstanding accomplishments in promoting the practices, principles, and procedures of energy engineering. This year we based it on a vote of the Board of Directors of AEE SoCal Chapter on the best monthly meeting presentation.

MATTHEW BERB'EE,

•Chapter Presentation – Facilities Energy, Finance & Environmental Leadership: The California Institute of Technology - Energy Conservation Investment Program

Facilities Energy, Finance & Environmental Leadership: The Caltech Energy Conservation Investment Program

How Caltech Designs and Manages Green Revolving Fund Investments for Energy Efficiency Facility Retrofits

Matthew Berbée provides an update from California Institute of Technology (Caltech), leading a dynamic discussion anchored around the success of the Caltech Energy Conservation Program (CECIP), a "green revolving fund".

Caltech has created the CECIP as a process by which the Institute's endowment is used to finance energy conservation projects. The endowment is reimbursed from avoided utility costs that result from the implementation of building HVAC and lighting retrofits. Over three program years CECIP projects have produced an avoided cost in excess of \$2M for the Institute.

Facilities Energy, Finance & Environmental Leadership: The Caltech Energy Conservation Investment Program

The CECIP process is enabling otherwise un-funded:
HVAC & lighting retrofits that are reducing deferred maintenance and ultimately yielding financial benefits through avoided utility costs.

The presentation will also discuss in the context of budgeting, planning, and balance, several completed high performance building retrofits at Caltech enabled by the green revolving fund.



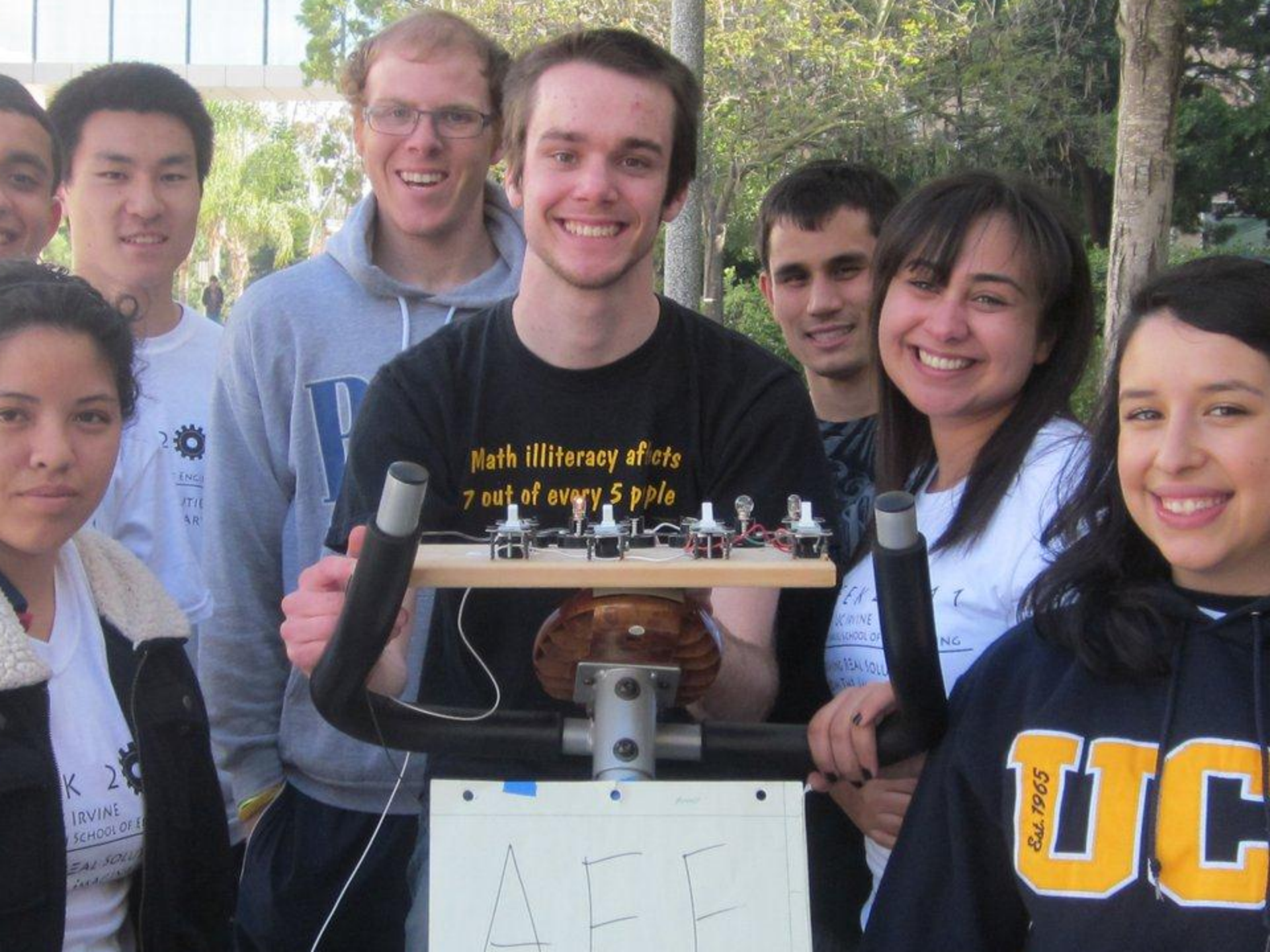
AEE SoCal Young Energy Engineer Professional of the Year

Young Energy Engineer Professional of the Year

Presented to a young energy engineer professional who has had a positive impact on the local chapter

MERNA IBRAHIM

- LEADERSHIP IN FORMING THE FIRST STUDENT CHAPTER OF AEE SO CAL
- BUILD YOUNG ENGINEERS PLACE IN AEE
- HELP STEAR ENGINEERS TO AN ENERGY CAREER



Math illiteracy affects
7 out of every 5 people

A E E

UC
Est. 1965





John Sosoka AEE SoCal Chapter Achievement Award

AEE SoCal Chapter Achievement Award

Presented for outstanding accomplishments which benefited the Southern California Chapter of AEE

ALAN RING

- OUTSTANDING CONTRACTING FOR A NEW WEBSITE
- MONTHLY MEETING ANNOUNCEMENTS
- LEADERSHIP IN THE CHAPTER



Southern California Energy Project of the Year

Energy Project of the Year

Recognizes an energy management project completed that has documented a high level of substantiated savings versus the actual installation and operational costs. The project took advantage of SCE and DOE smart grid investment grant.

•CUSTOM BUILDING PRODUCTS

CUSTOM BUILDING PRODUCTS COMPANY PROFILE

Custom Building Products is a manufacturer of grouts, adhesives and epoxies for the construction industry. Their products are all the items needed for tiling walls and floors with the exception of the tiles. They operate a 142,000 square foot manufacturing facility in Bell, CA.

Project Overview

This is an “Automated Demand Response” project , consisting of interfacing Honeywell ADR hardware/software with existing Allen Bradley industrial automation system to obtain electrical load shed during a scheduled event.

Combined Shed

331 kW out of 520 kW. 2 Meters

People/Companies

Jim Bell – Facilities and Maintenance Manager – CBP

David Murray – System Analyst – CBP

Jack Rosenthal – Auditor – Honeywell, Smart Grid Solutions

Edgar Llamas – TC/Project Manager – Honeywell





Load Shed Equipment Selection Control

MXIRP

IP05

IP10

IP15

IP20

IP55

MXITF

1S03

1S04

1S05/04

1S06

1S07

1S09

1S10

Vacuum Pit

Acryl Line

Dust Hog

HB

MXITF

1L01

1L02

1L03

1L04

1L05

1L06

1L07

SILO 4

SILO 5

SILO 6

SILO 7

SILO 8

SILO 9

SILO 10

Atlas

Sullair

IR

ENABLE LOAD SHED SYSTEM

Potential Power Shed

342 kW

Shed Status

Load Shed Status

MAIN MENU



Southern California Innovative Energy Project of the Year Innovative Energy Project of the Year

Presented for an innovative Southern California project that provide a unique approach for implementing renewable energy power generation and/or energy efficiency solutions

- **BOEING LONG BEACH LIGHTING PROJECT**
- **PIERCE COLLEGE – NEAR NET ZERO ENERGY**

BOEING – DOUGLAS CENTER B801

Dimmable lighting control system for entire facility beyond T24 requirements

Project Overview

- Tied to existing building automation system – one system with Lighting and HVAC
- Used power line communications
- Retrofit from 3 to 2 lamp – 32 watt fluorescents
- Dimmable ballasts with occupancy sensors and daylight harvesting
- Touch screens in elevator lobbies for after hour's control
- Same graphical interface building occupant desktop computers eliminating wall switches
- Implemented automated demand response – 30% reduction

People/Companies

Jeff Haberman – Boeing



PIERCE COLLEGE – SOUTHERN CAMPUS

M&O Building

Horticulture

Away from central plant

Project Overview

This is an “Near Net Zero Energy”. System meets 90–95% of heating, cooling and hot water on annual basis.

Elements

LED lighting, natural day lighting, 191 kWp(dc) PV, 2 – 65T absorption chillers and solar thermal array.

People/Companies

Blair Doane – LACCD

Paul Nieman – LAPC

Serge Adamian – SunChiller

Bill Reifsteck – GKK Works

Victor Sanvido – Southland Industries