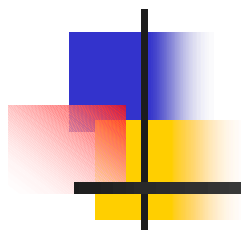


Emerging Technology Coordinating Council - ETCC



28th Annual Utility Energy Forum
Tahoe City, California

Henry Lau, Ph.D, PE
Design & Engineering Services
Southern California Edison
May 2, 2008



History

- Founded in 2000
- Objective: Coordinate among California IOUs and CEC PIER on emerging technology programs
- Members: CEC PIER, Pacific Gas and Electric, Southern California Edison, Southern California Gas, and San Diego Gas and Electric

Challenges





Activities

- Meet at least quarterly
- Hold Emerging Technology Summit every other year
- Maintain a website (etcc-ca.com) for information transfer

ET Program Funding Level



- CEC PIER: \$75 millions/year
- PG&E: \$3.9 millions/year
- SCE: \$3.8 millions/year
- SCG: \$1.0 million/year
- SDG&E: \$1.4 millions/year



Program Budget and Goals

(2006-2008 Funding Cycle)

IOU	Budget, \$Million	Technologies
PG&E	\$11.26	45
SCE	\$11.43	45
SDG&E	\$4.09	20
SCG	\$3.00	18
Total	\$29.78	128



Technologies from PIER Program

- Bi-Level Stairwell Fixture
- Electrochromatic Windows
- Energy Efficient Downlights for Kitchen
- Electrodialysis for winery
- Occupancy Night Lights for Hotels/Motels
- Hot/Dry Air-Conditioning Units
- Power Supply for Data Center – 80 Plus

Sample of Projects

- Bi-Level Control of Stairwell Lighting
 - PG&E – Highrise Building w/75% savings
 - SCE – Lowrise Buildingw/27% Savings

- Automatic Sash Positioning Control of Fume Hood
 - PG&E – UC Davis w/13kWh/CFM savings
 - SCE – Amgem w/22.6kWh/CFM savings



Sample of Projects (Cont'd)

- Electrodialysis for winery
 - PG&E – Stationary machine
 - SCE – Portable machine
- Circulators for Waste Water Treatment
 - PG&E – Solar Powered
 - SCE – Grid Connected





Co-Funded Projects

- Wet Cleaning – SCE & SCG
- Efficient Power Supply for Data Center – PG&E, SCE, other utilities
- Incorporating Data Center into eQuest – PG&E, Sempra, SCE.



Latest Activities

- IOUs were asked by the CPUC to coordinate with the California Municipal Utilities on ET Program
- Invite the Municipal Utilities to the ETCC meetings
- 2008 ETCC Summit will be held at San Diego Hyatt Mission Bay on October 26-28, 2008. For more information, go to etcc-ca.com



ETP Supporting Strategic Planning

- Incubator Project – accelerate the introduction of EE product by infusion of venture capital and angel funds
- Pilot Projects - increase market penetration of ET
- Renewable Energy – to meet the Net-Zero-Energy Buildings in 2020 & 2030



Five Strategies for Emerging Technology Program

- Enhance Market Intelligence and Behavioral Research Activities
- Expand Activities in Market Pull for Energy-Efficiency Technologies
- Promote Upstream Channels and Investment in Promising Energy Efficiency Technologies
- Drive Product Improvement and Adoption Activities
- Focus on the “Leading Edge”



ETP Supporting California Big & Bold Initiatives

- Net-Zero Residential Homes by 2020
- Net-Zero Commercial Buildings by 2030
- Residential and Small Commercial HVAC
- Achieve 100% of Electricity Economic Potential in the Industrial Sector by 2015

2008 ET Summit

2008 EMERGING TECHNOLOGIES SUMMIT!

Presented by
The Emerging Technologies Coordinating Council ETCC

October 26-28, 2008

HYATT MISSION BAY, SAN DIEGO, CA



WHAT IS ETCC?

ETCC

The Emerging Technologies Coordinating Council (ETCC). San Diego Gas and Electric, Southern California Gas Company, Southern California Edison, Pacific Gas and Electric Company and the California Energy Commission (CEC).

ETCC member utilities promote new cost-effective energy saving technologies – the basis for products and services that strengthen the region's economy while meeting the environmental challenges of today and tomorrow.

The ETCC is pleased to present its 3rd biennial Summit on "Emerging Technologies in Energy Efficiency."

Meet top industry experts who will discuss the latest innovations in energy-efficient technologies and practices.

This is a unique opportunity to explore promising new technologies and learn about current key policy considerations at the local, state and national levels.

For more information and to register
Please visit our website at: www.etcccconference.com