



# California Commissioning Collaborative Meeting Agenda

**May 21, 2009**

Southern California Edison  
Customer Technology Application Center (CTAC)  
9:00 a.m. – 2:30 p.m.

## **Attendees**

### **Advisory Council**

James Bryan, Arden Realty, Inc.  
Tav Commins, California Energy Commission  
Keith Forsman, Pacific Gas & Electric Co.  
Don Frey, Architectural Energy Corporation  
Randall Higa, Southern California Edison  
Ed Jerome, Cogent Energy  
Michael Lo, Southern California Edison  
Tony Pierce, Facility Dynamics  
Jim Rosier, Equal Air Balance  
Shane Schroeder, Target  
Reinhard Seidl, Taylor Engineering  
Mark Walter, Keithly Barber Associates

### **Board of Directors**

Chuck Poindexter, San Diego Gas & Electric  
John Cullum, Southern California Gas  
Norm Bourassa, California Energy Commission - PIER

### **CCC Staff and Consultants**

Jim Flanagan, Jim Flanagan & Associates  
Kirstin Pinit, California Commissioning Collaborative

### **Guests**

Senthil Arunachalam, ARUP  
John Beck, EMC Engineers  
Beth Chambers, California Energy Commission - PIER  
Eliot Crowe, Portland Energy Conservation, Inc.  
Dave Deming, PMC  
Erik Emblem, 3 E International Incorporated  
Joseph Lee Ong, Nexant  
Mugimin Lukito, Southern California Edison  
Charles Kim, Southern California Edison  
Ann McCormick, Newcomb/Anderson/McCormick  
Anton Paley, American Commissioning Group  
Amanda Potter, Portland Energy Conservation, Inc.  
Tom Reichert, Engineered Mechanical Services, Inc.  
Mike Schwonke, Southern California Edison  
Mario Teran, Sheet Metal Workers LU105  
Charlotte Wagner, Cogent Energy  
Tom Webster, Center for the Built Environment

## **Welcome, Introductions, and Announcements**

Don Frey called the meeting to order at 9:30 a.m. Attendees introduced themselves.

## **CCC Policy Update and Next Steps**

Jim Flanagan reviewed the CCC process for developing the "CCC Point of View" on key policy issues that affect the commissioning industry in California.

- January 2009: Advisory Council brainstorms and prioritizes key policy issues
- March 2009: CCC consultants develop POV document draft and review with Advisory Council and Board members for clarification of individual issues, supporting statements and articulation of CCC POV
- April-May 2009: CCC consultants incorporate comments; define next steps
- June 2009 and beyond: POV document used to guide messages presented by CCC in various policy venues; revised and updated as needed

Mr. Flanagan discussed the next steps for taking the CCC POV messages to appropriate policy-making processes and individual influencers. Policy issues and next steps are organized into categories:

- Cx and RCx in Building Standards
- Short-term CPUC Policy Opportunities
- Long-term CPUC Policy Opportunities
- Expanding Cx Provider and Market Capacity
- Overarching Topics (related to the California Long-Term Energy Efficiency Strategic Plan; and overall Cx process issues)

The CCC's Point of View document and summary of next steps will be posted on the CCC website.

## **Wireless Measurement System for Building Monitoring and Commissioning**

Tom Webster from the Center for the Built Environment presented research and development work at CBE related to the development of a wireless measurement system for building monitoring and commissioning. This work enables faster, more efficient collection and analysis of building energy use data to support unprecedented levels of building performance requirements related to emission reduction goals; new regulations for building performance standards and building labeling, etc.

The PowerPoint of this presentation will be posted on the CCC website.

## **Target Commissioning**

Shane Schroeder from Target presented an overview of the commissioning program at Target, including:

- Target's definition and approach to commissioning
- Background and history of the program
- Team Structure
- Commissioning Programs

## **CCC Project Planning**

Mr. Frey led a discussion with attendees to help inform the CCC staff and Board of Directors on future project needs that the CCC should consider. The discussion focused on current industry needs and the CCC's position in the industry.

Advisory Council members were asked to comment on what has been working and what has not been working in the industry over the past three-five years. Responses are summarized in the table below.

During the discussion, a number of potential project topics emerged:

- Development of a large database of RCx projects/measures to provide a basis for standardized prescriptive RCx measures
- Work with CPUC to develop reasonable assumptions for DEER (Database for Energy Efficient Resources) related to RCx measures
- Support for next generation RCx program designs:
  - Framework for allowing EE credit for quick-fix measures that can be implemented during initial building walk-through

- Integration of RCx with other EE offers (fair and comprehensive attribution of savings, better experience for customers)

The Board of Directors will discuss this input at their next Board Meeting.

**Meeting Participant Feedback:  
Perspectives on the Growth of the Cx Industry in California over the Past 3-5 Years**

<b>What is Working in the Cx Industry</b>	<b>What is Not Working in the Cx Industry</b>
Buzz about Cx is growing	Lack of qualified providers
Interest from related fields is growing	Confusing and conflicting certification process; owner confusion regarding provider qualifications
Owner awareness/acceptance of Cx has grown tremendously	CPUC direction for EE/RCx incentive programs is not clear (especially EM&V requirements); utilities must base programs on their interpretations
Growth of rebate programs and LEED are market drivers	Lack of apprentice programs to build up the provider workforce
Partnership Programs seem to be working well – less marketing cost, higher incentives, long-term owners are willing to participate	Free-rider issues
Technical advances enable better analysis; wireless technology continues to advance	Lack of program consistency and integration leads to complexity and confusion for customers
Programs and providers starting to get more consistent; improvements from lessons learned in early efforts	Need ways to get deeper savings from projects; incentive levels do not allow for an in-depth investigation
CCC has made great contributions to the industry in California; PIER work establishes credibility	Lack of prescriptive approaches to streamline/scale up RCx; one-off efforts are inefficient
Educational opportunities through NCBC, CCC, BCA, PG&E's PEC	New/inexperienced providers are inconsistent
	Implementation is slow; need greater commitment from owners
	Lack of significant Cx/RCx project data and case studies to validate the benefits
	Persistence of benefits is lacking
	“Commissioning” scopes are not standardized

**Wrap - Up**

Mr. Frey concluded the meeting by asking for suggestions for future CCC meeting topics, and the following suggestions were made:

- Effect of the economic recession on the commissioning industry (e.g. owner commitment)
- CAL SMACNA white paper on acceptance testing
- Title 24 code enforcement issues (possible presenter: CALBO); connection with California Long-Term Energy Efficiency Strategic Plan

The next CCC meeting will be hosted by SMUD on August 20, 2009.

The meeting adjourned at 2:30 p.m.