



# California Commissioning Collaborative Advisory Council Meeting Minutes

**September 16, 2010**

San Ramon Valley Conference Center

9:30 a.m. – 3:45 p.m.

## Attendees

### Advisory Council

Tav Commins, CEC  
Greg Cunningham, Enovity  
Don Frey, LightLouver  
Phil Haves, LBNL  
Shane Schroeder, Target

### Board of Directors

Bruce Baccei, SMUD (for Jim Parks)  
Chuck Poindexter, San Diego Gas & Electric  
Glenda Towns, So Cal Gas

### CCC Staff and Consultants

Phil Welker, California Commissioning Collaborative (Executive Director)  
Kirstin Pinit, California Commissioning Collaborative  
Brenda Hopewell, California Commissioning Collaborative

## Guests

John Beck	EMC Engineers
Martha Brook	California Energy Commission
Dan Burgoyne	Department of General Services
Terry Cadigan	Lawrence Hall of Science
Dan Carroll	Performance Mechanical Group
Safdar Chaundhry	Nexant
Joan Connolly	Certified Sustainable Building + Designer
Scot Duncan	ROI Engineering
Erik Dyrr	KEMA Services, Inc.
Erik Emblem	3 E International Incorporated
Tim Fryxell	Guttman & Blaevoet
Ken Gillespie	PG&E
Tia Hanson	Newcomb Anderson McCormick
Breesa Kassing	PG&E
Irma Kemp	ACCO Engineered Systems
James Koepfel	friendly building inspections
Bill Koran	QuEST
Tony Salvador	ACCO Engineered Systems
Jonathon Stage	EMCOR Energy Services
Brian Tanahashi	Johnson Controls
Josaphine Tichel	PG&E
Joy Ulickey	Enovity

## Welcome, Introductions, and Announcements

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

Bruce Baccei announced the Emerging Technology Summit 2010 to occur on November 7-9. More information on the conference is available at <http://etcc-conference.com/>.

Kirstin Pinit and Brenda Hopewell provided updates on CCC projects and recent activities:

- Title 24 Training for Building Inspectors and Plans Examiners is ongoing.
- PIER Research updates
  - CCC Staff has developed webpages to provide information on scopes, progress and completed reports. These pages can be accessed at <http://www.cacx.org/PIER/>
  - Two Project #4 deliverables will be available on the CCC website by 9/30.
  - The next PAC meeting will be held remotely on 10/14. Additional information is available by contacting [esibley@peci.org](mailto:esibley@peci.org).
- Policy Updates
  - The CCC is working with the CPUC to develop action plans and next steps for achieving commissioning-related milestones in the California Long-Term Energy Efficiency Strategic Plan (CLTEESP).
  - The CCC is tracking the progress of AB 758 and will look for opportunities to provide input and feedback as appropriate.
  - The status of Building Star legislation and the DOE Commercial Real Estate Energy Alliance (CREEA) are also being monitored by the CCC.

## Guide to the 2010 California Green Building Standards Code

*Dan Burgoyne, DGS*

Mr. Burgoyne presented information about the California Green Building Standards Code (CALGreen), scheduled to go into effect January 1, 2011. The CALGreen code is applicable for non-residential new construction over 10,000 square feet and is the first to incorporate commissioning as a requirement; providing a great leap forward for the industry in California.

In an effort to make the new commissioning code implementation go smoothly, and to help clarify the content for building owners, commissioning leads, and building inspectors, the Building Standards Commission established a taskforce. The taskforce is comprised of several entities including government, NGOs, including the CCC, Cx Providers, and more, and has the goal of creating an accessible Guide to help clarify the code requirements.

Mr. Burgoyne reviewed the content of the code and the format and intent of the draft Guide. The Advisory Council and guests discussed the code and Guide and several attendees volunteered to provide review comments. Several attendees noted the need for additional educational programs for building owners and building officials to ensure the requirement is understood and enforced.

## The Role of Cx in the Implementation of AB 758

*Martha Brook, CEC*

Ms. Brook presented information and led a discussion on AB 758 and commissioning.

The group discussed challenges related to developing asset ratings isolated from operational ratings.

There was additional discussion about rating and disclosure triggers, which may include: time-of-sale; permit for major renovation; building/system vintage – required at a certain age; building type/size – required by a certain date; include in AB1103 requirement; annual public disclosure; performance-based triggers; addition of asset rating to utility program benchmark requirement

Some of the concerns raised by the group include:

- Need for a building performance target to drive triggers and mandates for improvements and/or motivate owners to make voluntary energy efficiency improvements

- The workforce available to perform the audits
- Need to determine the building owner business case for asset rating/disclosure; without industry support regulation will be unable to succeed
- For voluntary ratings: need to create market demand, increase awareness; promote success stories and industry leaders
- The current economy has led to many owners relatively unmotivated to make improvements

## **Upcoming CCC Activities and Topics**

*Don Frey, LightLouver*

Mr. Frey announced that the December CCC meeting would be an Advisory Council working session on the topic of 'EBCx market and utility program topics'. The meeting will be held on December 2<sup>nd</sup> at the Energy Resource Center in Downey, CA. This meeting is tentatively planned to be an Advisory Council only meeting, but final details will be announced by early November.

Mr. Frey also presented a list of potential dates and topics for the 2011 Advisory Council meetings and the group offered the following additions:

- Commissioning approaches and techniques
  - Building controls systems
  - "Systems-approach"
- CALGreen progress and ongoing issues
- Post turn-over performance. Assessing energy efficiency and sustainability; development of standardized reporting, and scorecards

The **tentative** 2011 CCC meeting dates were presented to the group.

- March 24 – Hosted by SMUD
- June 9 – Hosted by SCE
- September 8 – Hosted by PG&E
- December 8 – Hosted by SDG&E

Attendees were asked to email [info@cacx.org](mailto:info@cacx.org) if known conflicts exist with these dates.

## **ECAM Tool Update/Demonstration: PNNL's Building Re-tuning Process**

*Bill Koran, QuEST and Srinivas Katipamula, PNNL*

Mr. Koran offered an overview and demonstration of the ECAM tool and indicated that a beta version is available from him by request at [wkoran@quest-world.com](mailto:wkoran@quest-world.com).

Mr. Srinivas offered a presentation on PNNL's Building Re-tuning Process. He also informed the group that PNNL offers training in northern California for building operators. See presentation for contact information.

## **Improving Persistence of RCx Benefits: Energy Anomaly and System Fault Detection Toolsets (PIER Task 4.3 Project Report)**

*Joy Ulickey, Enovity*

Ms. Ulickey presented findings from PIER Task 4.3: Characterize Energy Performance Tracking Strategy Support Tools.

Her presentation included information about how to improve the persistence of RCx benefits through the identification of energy anomalies and the use of system fault detection tools. She indicated that there is currently low awareness by building owners of the tools and options available for these functions.

## **Load Based Optimization System (LOBOS) Case Study and Site Tour**

*Scot Duncan, Retrofit Originality Incorporated*

Mr. Duncan presented ROI's Load Based Optimization system (LOBOS) and a case study based on work done onsite at the San Ramon Valley Conference Center. The presentation was followed by a tour of the conference center chilled water plant led by Ken Gillespie of PG&E.

The meeting adjourned at 3:45 p.m.