California Commissioning Collaborative
Advisory Council Meeting Minutes

February 7, 2008
SMUD Customer Service Center
9:00 am – 3:30 pm

Attendees
Advisory Council Members
James Bryan, Arden Realty
Greg Cunningham, Enovity
Ken Gillespie, PG&E
Satinder Gulati, California State University
Paul Ham, Target
Philip Haves, LBNL
Randall Higa, SCE
David Jump, QuEST
Tony Pierce, Facility Dynamics
Chris Scruton, PIER
Reinhard Seidl, Taylor Engineering
John Wimer, National Center for Energy
Management and Building

Board Members
Norm Bourassa, PIER
Dan Burgoyne, DGS
John Cullum, SoCal Gas
Greydon Hicks, PG&E
Jim Parks, SMUD

CCC Staff
Kirstin Pinit, PECI
Phil Welker, PECI

Others
Amber Ackman, EE Initiative
John Beck, EMC
Erik Emblem, 3E International
Keith Fairless, EMC
Hannah Friedman, PECI
Elaine Hebert, PIER
Ed Jerome, Cogent
Ann McCormick, Newcomb Anderson
McCormick
Amanda Potter, PECI
Brian Smith, enerNOC
Bing Tso, SBW
Peter Turnbull, PG&E
Dave Walls, California Building Standards
Commission
Solomon Wong, CalTrans

Welcome, Introductions, and Announcements
Phil Welker called the meeting to order at 9:30. Attendees introduced themselves and gave brief announcements.

- Dan Burgoyne encouraged attendance at the Green California Summit that will be held in Sacramento, April 7-9. More information is available at: www.green-technology.org/gcsummit.
- Kirstin Pinit announced the completion of the CCC’s Analysis and Development of Educational Opportunities project. This study was conducted by Nexant, and the final report will be available on the CCC website by the end of the month.

CCC Program Updates
Phil Welker gave a brief update on the Board of Directors’ strategic planning process, including anticipated budgets for 2008 and 2009-2011.

Hannah Friedman presented an overview of the CCC’s PIER-funded commissioning research program accomplishments and next steps.

- In January, the CCC released the RCx Toolkit that was developed under this funding. It is available on the CCC website.
- Follow-on work under this contract will include support for M&V guideline development and tools for retrocommissioning and M&V. RFPs for tool development will be released by the CCC in the coming months.
The group discussed issues around additional tool development and the utilities’ need for standard approaches and calcs. Discussion of tools for verification of savings brought up issues of persistence of measures, system-level vs. measure-level verification, verification of non-energy benefits, and opportunities to develop tools that have value for other stakeholders (like gathering data that can be applied to carbon reduction initiatives).

**CPUC Strategic Planning Update**
Peter Turnbull gave an update on the IOU’s strategic planning process, highlighting the commercial section of the plan.
- The vision statement for the commercial plan emphasizes a path to net-zero buildings (new and many existing buildings) by 2030. This will be accomplished through innovative technologies, financing and incentives, codes and standards, and market pull.
- Four key areas of the plan address 1) codes and standards, 2) benchmarking, 3) incentives and financing opportunities that support the strategic plan, and 4) promoting integrated design for new construction and major renovation.
- The draft plan will be filed with the CPUC in the next week and will be open for comment.

**Evaluation Findings and Recommendations**
Bing Tso presented on EM&V of retrocommissioning programs, highlighting key issues, findings and lessons learned. Questions from the group lead to a lively discussion of M&V issues. The PowerPoint presentation will be posted to the CCC website.

**Verification of Savings - Phase 2 Proposal**
David Jump presented a recommendation for Phase 2 of the CCC’s Verification of Savings project. This revision to the original scope allows for the development of a measurement guideline for use in retrocommissioning projects and upcoming utility retrocommissioning programs. The Board of Directors plans to review this recommendation at their meeting, following the Advisory Council meeting.

**PG&E Benchmarking Program**
Keith Forsman presented PG&E’s program to provide automated benchmarking for their customers, using the EPA Portfolio Manager. The PowerPoint presentation will be posted to the CCC website.

**Green Building Standards: California Codes**
Dave Walls gave an overview of the green building code being developed in California. The PowerPoint presentation will be posted to the CCC website.

**ASHRAE Dashboard Research Project**
Reinhard Seidl introduced this project to the group, highlighting recent progress and ways for interested parties to get involved. The Dashboard Research Project will focus on the role of the user interface in modern EMCS (Energy Management and Control Systems) to find ways of improving building operation. More information is available at [www.taylor-engineering.com/dashboard](http://www.taylor-engineering.com/dashboard).

**Demo: Universal Translator**
This agenda item was held for a later date. Information on the Universal Translator can be found at [www.utonline.org](http://www.utonline.org) and [www.taylor-engineering.com/UT](http://www.taylor-engineering.com/UT).

**Wrap - Up**
Future agenda topics were discussed.
- Demo of Universal Translator (Reinhard Seidl)
- Review of CCC program plan and projects in progress
- Training-related topics: ASHRAE training development (Gerry Kettler), discuss development of Sacramento State certificate program in commissioning and retrocommissioning, discuss other ways to bring new providers up to speed
- Emerging opportunities for mobile and wireless communication and building operations
- Potential for developing a building certification for commissioning/retrocommissioning (BCA?)
- Potential for development of a design guide for new construction that includes ongoing commissioning after turnover.

Phil Welker thanked SMUD for hosting the meeting.
The Meeting adjourned at 3:30.