California Commissioning Collaborative  
Meeting Minutes  
February 11th, 2005  
SMUD Customer Service Center  
Sacramento, CA

### Attendees

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<tr>
<th>Board</th>
<th>Advisory Council</th>
<th>Other Attendees</th>
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<tr>
<td>Ed Becker</td>
<td>Martha Brook</td>
<td>Jeff Beuder</td>
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<td>Grant Duhon</td>
<td>Doug Chamberlin</td>
<td>Jeff Bisson</td>
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<tr>
<td>Chip Fox</td>
<td>Tav Commins</td>
<td>Norm Bourassa</td>
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<td>Nancy Jenkins</td>
<td>Don Frey</td>
<td>Greg Cunningham</td>
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<td>Jim Parks</td>
<td>Randall Higa</td>
<td>Erik Dyrr</td>
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<td>Dan Burgoyne (for R. Conrad)</td>
<td>Don Little</td>
<td>Cliff Federspiel</td>
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<td>Bill Pennington</td>
<td>Tony Pierce</td>
<td>Al Garcia</td>
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<td>Ingo Giani</td>
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<td>Philip Haves</td>
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<td>Kristin Heinemeier</td>
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<td>Owen Howlett</td>
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<td>Jerry Ingwalson</td>
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### Welcome & Introductions

*Don Frey, Advisory Committee Chairperson*

### Presentations

1. *California Green Building Executive Order – Dan Burgoyne, DGS*

Mr. Burgoyne explained the motivation behind the Executive Order, gave an overview of the State’s real estate portfolio, and summarized the Order’s objectives. He also reviewed the supporting Green Building Action plan and its requirements and financing. LEED requirements for new and existing buildings were also explained. The discussion then turned to Section 2.1.4 of the Green Building Action plan and the Cx and RCx guidelines to be produced for the State in support of the plan, and a mention was made that there would be at least one public workshop to discuss them. Also noted was the request of EnergyStar to use its benchmarking system and the comment that the State had not decided whether or not to incorporate it yet and was also working with PIER to do a side-by-side comparison with the Cal-Arch tool. Board Members expressed their support of CCC funding for both the guidelines and benchmarking activities.
2. Cx Workshops for Owners – Phil Welker, PECI

The presentation outlined the proposed agenda and a preliminary list of speakers for these one-day commissioning workshops. Attendees responded that two tracks (for Cx and RCx) would be beneficial, that the local utility would introduce and “host” the events, that private owners are preferable as speakers, and that the technical information should be tracked by level of commissioning knowledge (Option 3 on the presentation). Members also suggested potential speakers and messaging partners.

Action Item: PECI will contact the speakers and messaging partners suggested.

Discuss the New Scope of Work: CCC Report to Support Utility Commissioning Programs

Attendees made several helpful suggestions, including: that specific inputs be added for CE and TRC calcs for utilities, that the report draw on a cost-benefit study that Quantum Consulting is conducting for NEEA, and that Nancy Jenkins, CEC be involved in discussions with the CPUC.

Discuss Next Steps on the Cx Case Study Database

This presentation outlined the goals and proposed steps for reviewing and revising the Cx Case Study Database. It described the existing database’s key features, format, strengths and challenges as compared to the LBL cost-benefit study. The priorities stated are to revise, populate and analyze the data and recommended next steps are to conduct market research to determine the data needs and refine goals, update database based on cost-benefit study strengths, develop a plan for populating the database, and disseminate the results.

Comments were made that self-reported energy savings are acceptable, as long as they are noted as such and should be differentiated between calculated and metered savings. Verification was recommended by statistical sample as compared to verified savings. The Cx Workshops were identified as good forums to ask some of the marketing questions. The question was raised as to whether the database was still necessary, and it was decided to separate the questions of what is needed by the CPUC and what is needed by owners to convince them that commissioning will be beneficial. The former is not as essential as it once as, and the latter should be addressed in conjunction with the Market Research project that is in the planning stages.

Progress Report on CCC Activities/Projects

Attendees found the progress on various CCC activities/projects to be acceptable.

Announcements

1. IEA Annex – Phil Haves

The International Energy Agency is convening an Annex on Commissioning for low-energy buildings, which will include topics such as existing buildings and cost benefit and persistence data. Participants include NIST, JCI, LBNL, US Army. Phil Haves will
distribute technical and process documents for review and comment.

2. **ASHRAE TC 7.9 – Kristin Heinemeier, PECI**
ASHRAE has finally passed Guideline 0—Total Building Commissioning Process, and is currently working on GL 1. Kristin is the formal liaison between ASHRAE’s Technical Committee 7.9 and the CCC.

4. **BCA Southwest Chapter – Kristin Heinemeier, PECI**
The Building Commissioning Association has a Southwest Chapter, which covers 8 states, including California, and Kristin is on the Chapter’s board. CCC announcements can be circulated to the CA BCA members through this chapter. Pete Kiethly is the liaison between the BCA and the CCC.

5. **NCBC – Phil Welker**
The National Conference on Building Commissioning is coming up on May 2-6, in New York City. This is an exceptional opportunity to network with others involved in the commissioning process and to hear the state of the art. Find more information on the PECI website: www.peci.com/ncbc.

6. **Next Advisory Group – M&V – Phil Welker**
The next meeting will be in late April, and the topic that will be focused on is Evaluation, Measurement and Verification for Cx and RCx.