



California Commissioning Collaborative

California Commissioning Collaborative Advisory Council Meeting

August 20, 2009





Agenda – A.M.

9:30 a.m.	Welcome, Introductions and Announcements	Don Frey CCC Advisory Council Chair
9:40 a.m.	CCC Announcements	Phil Welker, CCC Executive Director Kirstin Pinit, CCC Program Manger Misti Bruceri, CCC Consultant Jim Flanagan, CCC Consultant
10 a.m.	Acceptance Testing Enforcement - findings from the field	Tav Commins, CEC Roger Fuller, Sacramento County
10:45 a.m.	BREAK	
11 a.m.	SMACNA Acceptance Testing White Paper	Jim Rosier, Equal Air Balance Mark Kamrath, Bell Products Mechanical
11:45 a.m.	LUNCH (Provided)	



Agenda – P.M.

12:45 p.m.	Acceptance Testing Assistant – software demonstration	Lynn Benningfield, Benningfield Group
1:30 p.m.	PIER Research Program Kick-Off	Eliot Crowe, CCC Research Program Manager
1:45 p.m.	CCC Policy Research: Specifications for Monitoring, Data Collection, Storage, and Communication Capabilities in New and Existing Buildings	Misti Bruceri
2:15 p.m.	Discussion: Effects of the Economy on the Cx Industry	Don Frey
2:45 p.m.	Wrap-Up	Don Frey
3 p.m.	Advisory Council Meeting Adjourns	

Introductions & Announcements

Funding Opportunities for Cx Training

- CCC staff tracking funding opportunities at state and federal levels
- Opportunities considered:
 - CA Employment Training Panel (ETP) – funds delivery of training, pay for performance basis
 - DOE Funding Opportunity with CEC cost-share – curriculum development for Energy Cx Agents/Auditors
- No CCC budget in 2009 to pursue
- Options to partner/support other proposals to DOE:
 - Sacramento City College
 - PECI / CEC / BCA / NEEA / NYSERDA

Other CCC Announcements

- 2006-08 PIER Research Contract complete
 - Final report submitted in June
 - Many follow-on projects in upcoming 2009-11 contract
- ASHRAE GL 0.2 and 1.2 to reference CCC templates and sample documents
 - Will acknowledge CCC in the guidelines
- CCC documents cataloged in CEC Library and Library of Congress database
 - California Commissioning Guides: New and Existing Buildings
 - 2007 CA RCx Market Characterization

Policy Activities

Misti Bruceri

Jim Flanagan

Acceptance Testing Enforcement: Findings from the field

Tav Commins

Roger Fuller

Break

10:45-11:00 a.m.

SMACNA Acceptance Testing White Paper

Jim Rosier

Mark Kamrath

Lunch

12:00-1:00 p.m.

Acceptance Testing Assistant Software demonstration

Lynn Benningfield

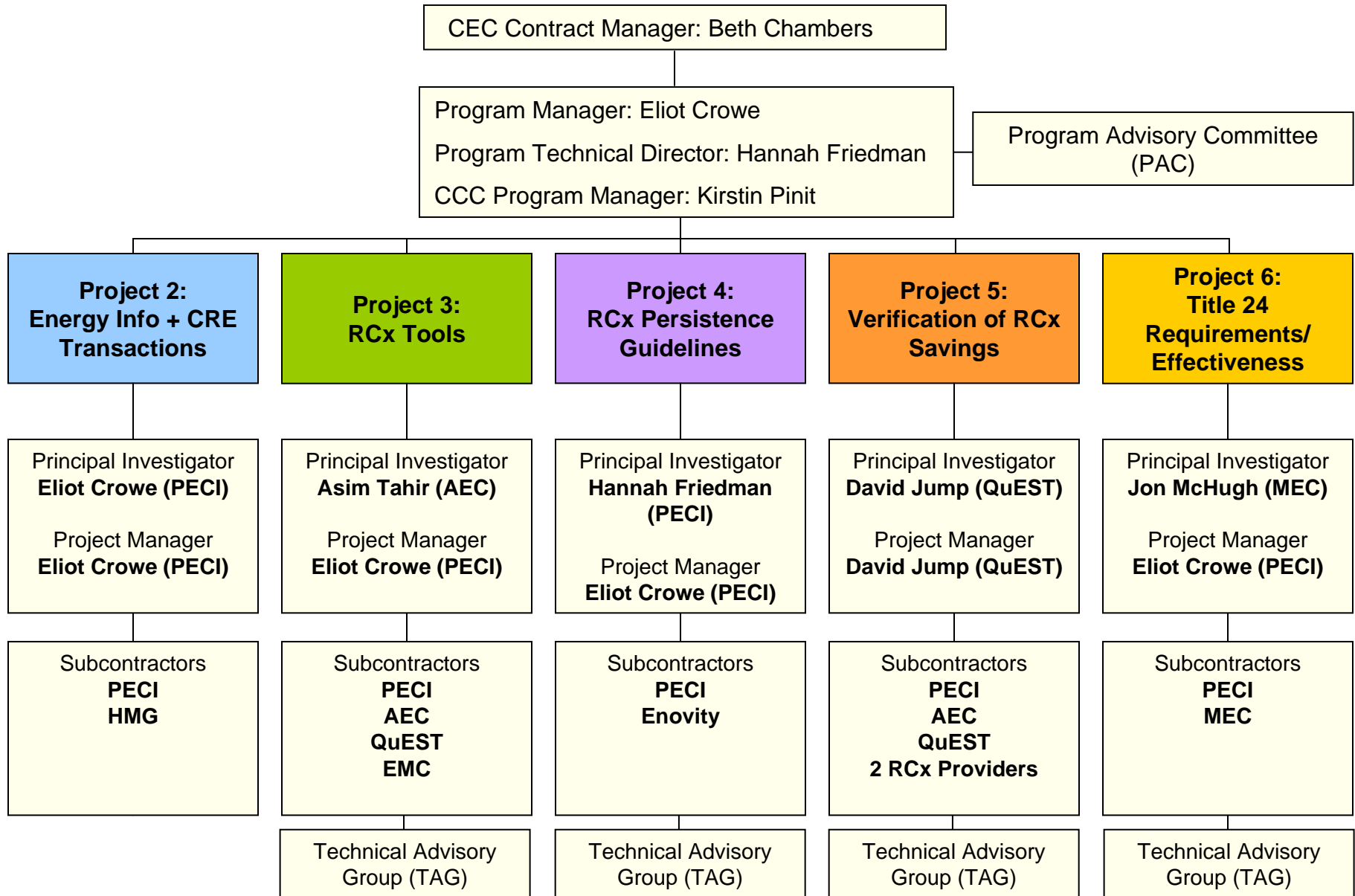
CCC PIER 2009-2012 Integrated Research Program

Building Commissioning: Strategies & Technologies for Energy Efficiency

Eliot Crowe

Overview

- 5 projects
- 7 firms
- Contract in place, CEC ↔ CCC
- Subcontractor contracts in process
- Program officially kicked off July 2009
- All projects due to kick-off by end August 2009
- Projects due to end late 2010 / 2011



CCC Policy Research

Specifications for Monitoring, Data Collection, Storage, and Communication Capabilities in New and Existing Buildings

Misti Bruceri

RCx Provider Survey – Draft

- Introduction
- Provider / Project Information
- Data Acquisition for Commissioning
- Other Items / Follow-up Call

Data Acquisition for Commissioning

- What is your level of experience with the following data collection technologies?

EMCS	Portable Data Loggers
Energy Information Systems	Fault Detection and Diagnostic Tools
Advanced Meters	Advanced Metering Systems
Interval Meters	Other?

EMCS Data Acquisition Elements

- Do you believe EMCS systems are generally capable of providing enough data for monitoring and diagnostic purposes?
 - If no, rate items that reduce usefulness:

System Capacity Inadequate	Number of Points Inadequate
Collection Frequency Inadequate	Data Storage Time Inadequate
Other?	

Data Collection Technologies

- Which data collection technologies, if installed perfectly, could enhance your ability to deliver cost-effective Cx services?

Smart Meters	Energy Information Systems
Energy Management Control Systems	Advanced Meters
End-Use Meters	Interval metering
Fault Detection and Diagnostics	Advanced Metering Systems

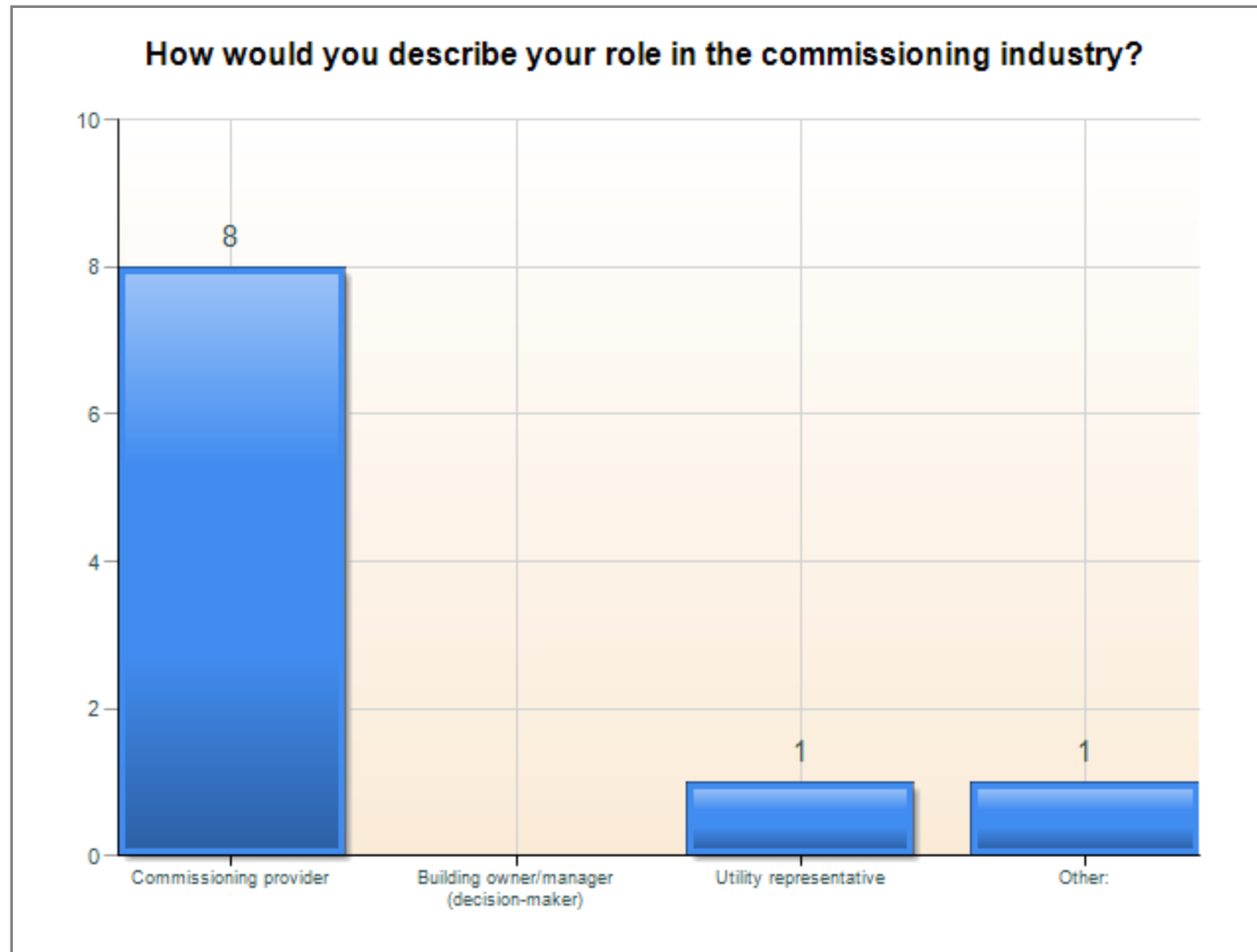
Additional Items

- Ideal / Adequate / Minimum
- Additional Ideas
- Telephone Follow-Up Interview
 - Additional detail, open-ended questions
 - CA Providers
 - Case Studies / Projects

Effects of the Economy on the Cx Industry

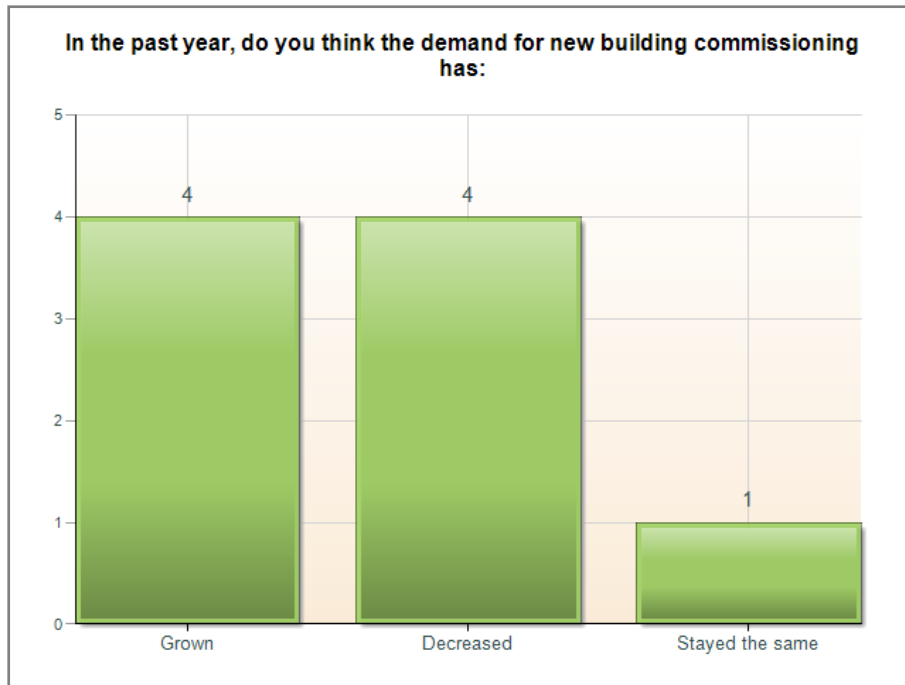
- Purpose: gather thoughts and observations from industry participants to provide a starting point for Advisory Council discussion
 - On-line survey to CCC email list
 - 10 responses

How would you describe your role in the Cx industry?

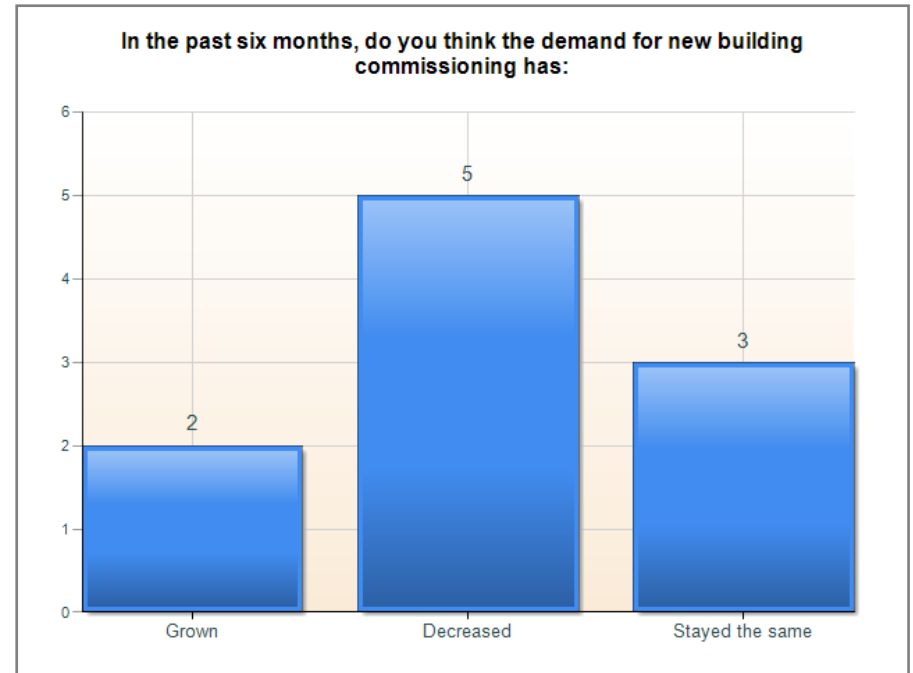


Demand for New Building Cx

Past Year

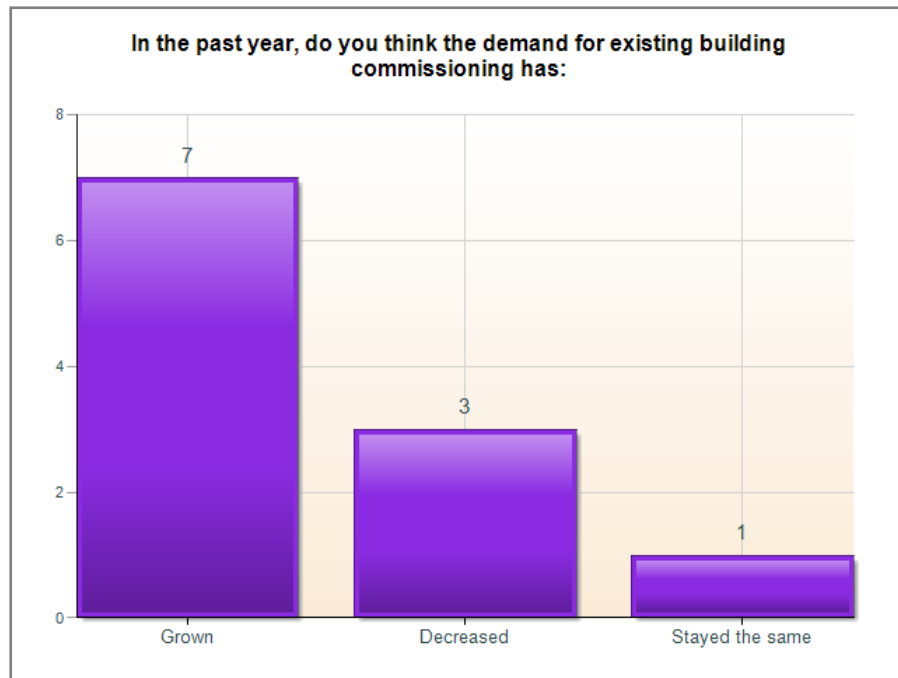


Past 6 Months

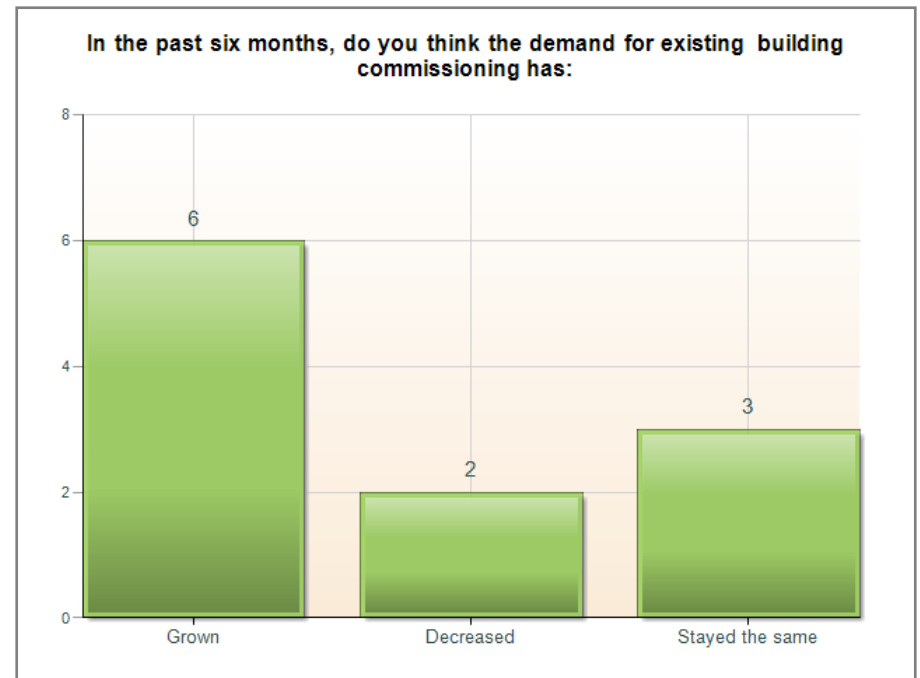


Demand for Existing Building Cx

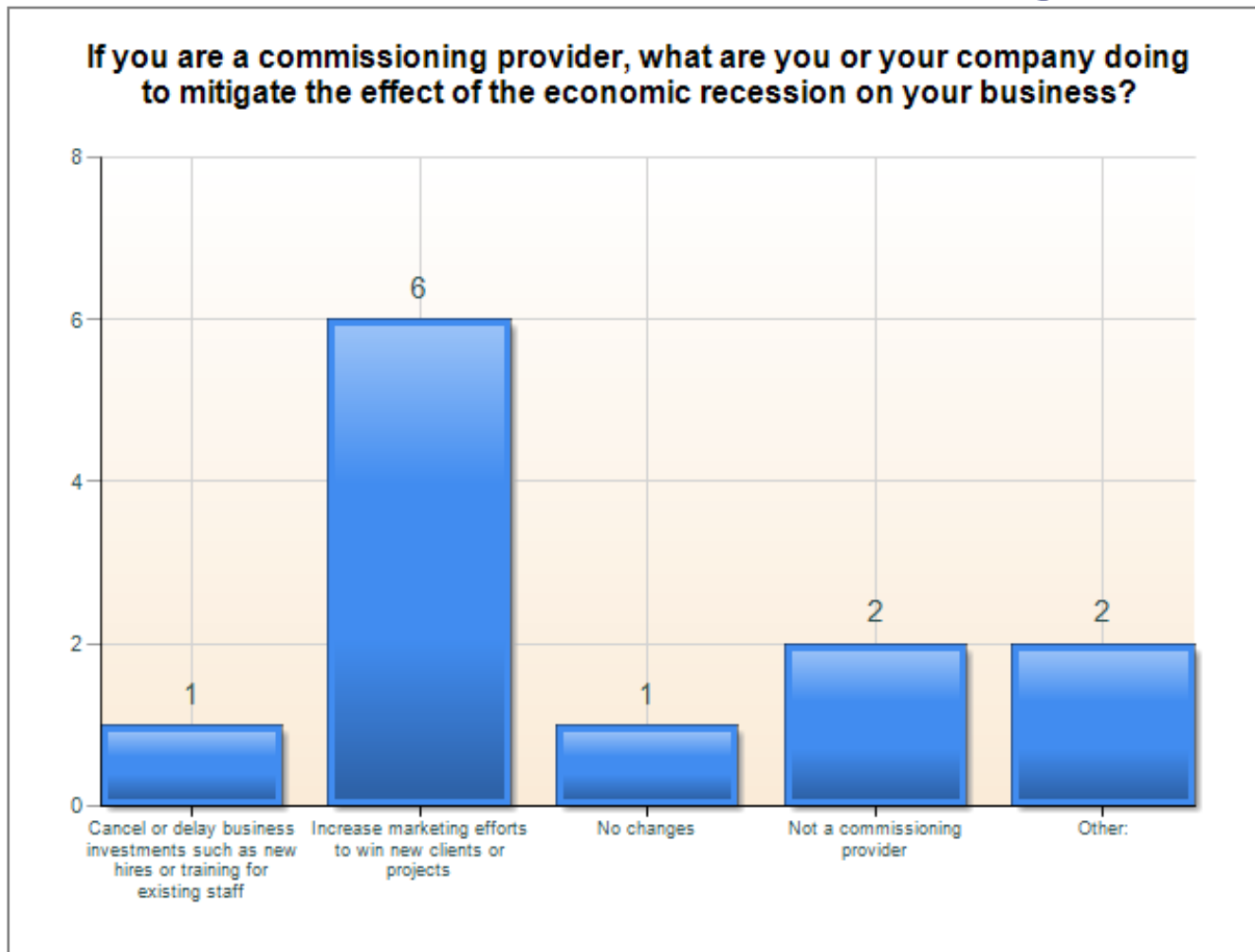
Past Year



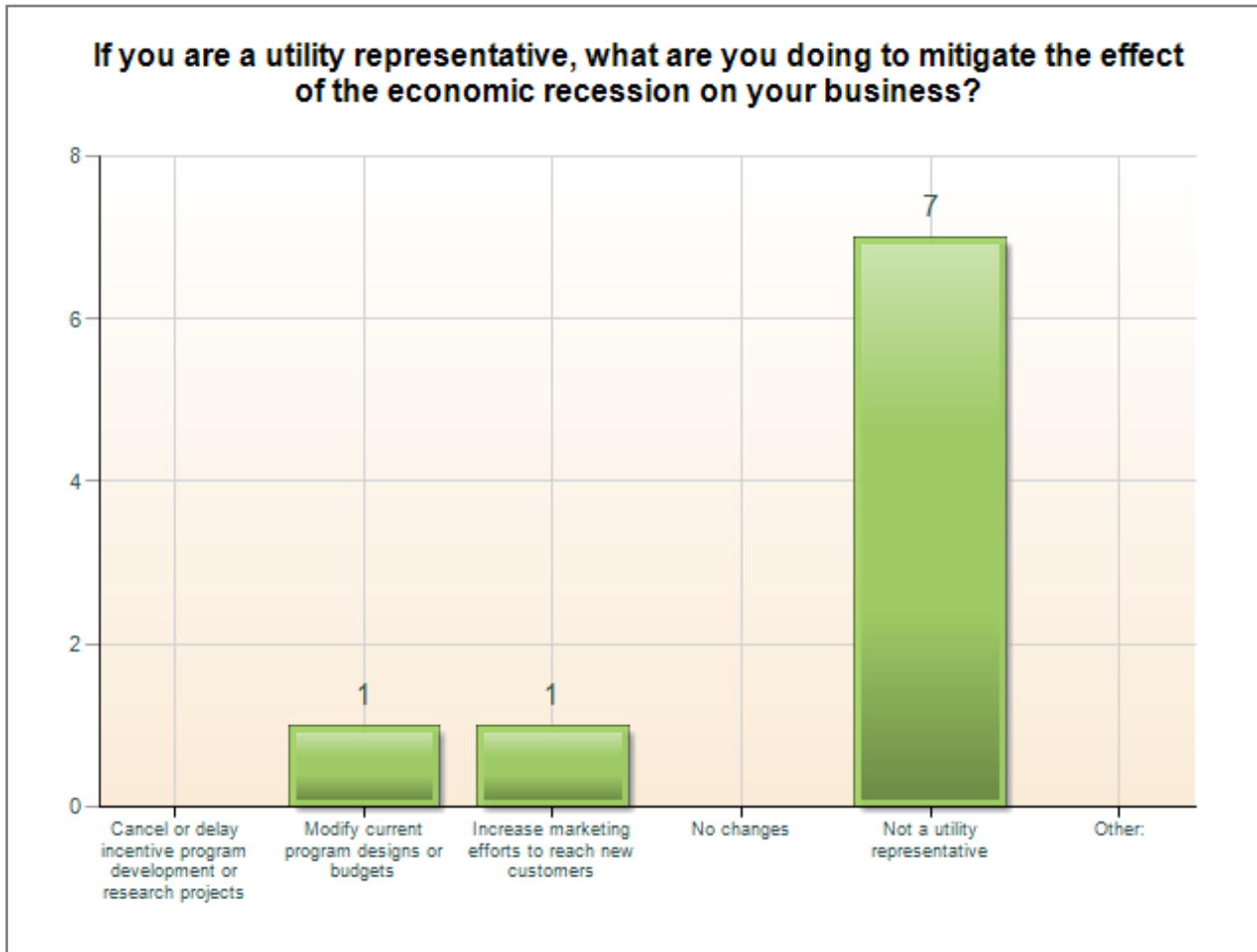
Past 6 Months



How are you mitigating the effects of the economic recession? Commissioning Provider



How are you mitigating the effects of the economic recession? Utility Representative



Responses on how the economy is affecting the Cx industry (open-ended question):

- No Cx initiatives are undertaken during this recession.
- The slow-down for large capital projects will come in '10 & '11.
- Building Owners and Managers are foregoing Cx on most projects or doing a lighter type of Cx for all projects.
- Business is good and getting better in Houston, TX. There is a shortage of capable Cx people.
- No- and low-cost measures that save energy and money are getting attention. When the economy is booming, new construction and/or keeping up with expanding markets is the focus.

Effects of the Economy on the Cx Industry

Discussion

- Advisory Council reactions and observations
- Next steps for...
 - Policy makers?
 - Private firms?
 - Utilities?
 - CCC?

Wrap Up

Next Meeting: Thursday, October 22

Location: San Diego Hilton (Airport/Harbor Island)

Host: Sempra

Agenda Topics

- Update/status of PIER research program
- Other Topics of Interest
 - Technical topics
 - Case studies – volunteers or invitations?
 - Program updates – volunteers or invitations?
 - Other needs?

Tentative 2010 Meeting Schedule

Date	Host
January 14	PG&E
March 25	SMUD
June 10	SCE
Sept. 9	SMUD
Nov. 18	Sempra

- Move to quarterly meetings in 2010?

Adjourn

*Thanks to SMUD
for hosting the meeting today!*