Building Monitoring

Don Frey, Moderator & CCC Advisory Council Chair
Principal, LightLouver LLC, www.lightlouver.com

April 12, 2012
## Agenda

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<td>Q&amp;A and Closing Comments</td>
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Welcome!

Web-Meeting Notes

• All participant lines are muted
• Please submit questions via the chat box to Don Frey
  • Look for menu at the top center of your screen (it will expand down when you move your mouse over it) and select chat box
  • Include the name of which speaker your question is for
California Commissioning Collaborative (CCC)

- CCC is a non-profit organization established in 2004 to:
  - Improve market understanding of commissioning
  - Address the economic drivers for commissioning
  - Strengthen California’s commissioning infrastructure
  - Expand market intelligence for the commissioning industry
- Board of Directors
  - Representatives from the CA utilities that fund the CCC
- Advisory Council
  - Utility, real estate, building services organizations and professionals
  - Advise the Board on technical issues and market intelligence
CCC Activities

- Encourage information-sharing and networking through meetings and online forums

- Support ongoing success and development of utility Existing Building Commissioning (EBCx) programs in CA

- Conduct commissioning-related research and development projects
New Tools on CCC Website

• Custom Building Optimization Tool (C-BOA)
  • The nine common EBCx measures included in C-BOA are:
    • Optimize Economizer Performance
    • Optimize Air handler Scheduling
    • Optimize or Reset Supply Air Temperature
    • Reduce or Reset Discharge Static Pressure Setpoint
    • Add or Optimize VFD on Supply Fan
    • Add or Optimize VFD on Chilled Water Pump
    • Optimize or Reset Chilled Water Supply Temperature
    • Optimize or Reset Condenser Water Supply Temperature
    • Add or Optimize VFD on Cooling Tower Fans
New Tools on CCC Website

• Guidelines for Verifying Savings from Commissioning Existing Buildings
  • This guideline establishes standardized verification methodologies, terminology, and procedures in order to address project objectives such as:
    • Clarifying savings verification concepts and procedures,
    • Establishing common and flexible methodologies appropriate to verify EBCx savings
    • Increasing confidence in each EBCx project’s reported savings.
    • Reducing costs of reviewing EBCx calculations, data, and results,
    • Helping new entrants into the field of EBCx
    • Providing a means for owners and program managers to verify and quantify the persistence of savings
Today’s Presentations:

**Introduction to Monitoring**
Jessica Granderson, PhD, Lawrence Berkeley National Laboratory

**Case Study: Microsoft**
Darrell D. Smith, Microsoft Real Estate and Facilities

**Case Study: The Vancouver Island Technology Park**
Dale Gann, VITP & Marine Technology Centre &
Brad White, P.Eng, SES Consulting
Case Study: Microsoft

Darrell D. Smith, Microsoft Real Estate and Facilities
Case Study: The Vancouver Island Technology Park (VITP)

Dale Gann, UVic's Technology Parks, VITP & Marine Technology Centre

Brad White, P.Eng, SES Consulting
Q&A

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  - Include the name of which speaker your question is for
Thank you for participating!

2012 Meeting Dates

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www.cacx.org

Let us know what you thought of the meeting. Please respond to the post-meeting survey. A link will be emailed to you.