Greetings,

Key Achievements Last Quarter - Autumn is upon us, and in spite of the lazy days of summer the BCA accomplished a lot. Our most significant achievement was finalizing the BCA position paper on commissioning qualification and certification.

In the position paper, we laid out the background and challenges of the industry and why national standards are necessary, especially as the built environment and its systems become increasingly complex and interrelated.

Following earlier discussions at NCBC and input from key industry members, we were able to reach consensus and our Board of Directors approved the BCA Commissioning Authority Qualification and Certification Statement at the end of June. This document states that as an organization we support “the establishment of a unified nationally recognized certification organization to establish minimum qualifications and standards for those who manage the total building commissioning process.” Our goal in establishing these standards is to strive for a very high level of qualification in order to raise the level of quality, professionalism and consistency in our industry.

We communicated our position paper to stakeholders and organizations across the built environment and have received a lot of positive feedback. We are now working with others toward making this vision a reality. If you haven’t had a chance to read the position paper, the document is available on the BCA website.

Executive Director - BCA Executive Director Liz Fischer has been busy over the summer too. In addition to updating BCA procedures and governance, she secured headquarters space, hired BCA staff and launched a BCA Open House attended by scores of commissioning professionals and others in the building industry.

In early September Liz met with NYSERDA, the NYC Mayor’s office, PECI and representatives from the New York state college and university system to evaluate current and future educational offerings in commissioning and energy auditor training. The PECI training was determined to be the most comprehensive and cost effective available. The Mayor’s office asked for her assurance that our Existing Building Commissioning class will be continued into next year to support the local law.

To explore potential BCA initiatives, Liz also met with representatives of FEMP and DOE in Washington DC about training and the potential for collaboration to develop a certification program. Further meetings with NEBB, ASTM, NIBS and AMCA in Washington resulted in bringing our organizations closer over common goals, and discussing ways the extended building industry can work together to improve outcomes and address common challenges.
Commissioning and building codes - There is significant effort going into development of commissioning language for building codes. The BCA’s Michael Chelednik has been working with the International Code Council to develop the ICC G4-2012 Guideline for Commissioning which provides guidance for code officials and regulators to use in order to competently enforce commissioning as identified in the new International Green Construction Code (IgCC). The ICC Cx Guideline was published in July 2012 and is available on the ICC Web site. Michael and Mike Eardley, President of the Building Commissioning Certification Board (BCCB), are currently working with the International Accreditation Service (IAS, a wholly owned subsidiary of the ICC), toward developing a commissioning accreditation program. The objective of the Task Group is to develop an Accreditation Criteria for Organizations Providing Training and/or Certification of Commissioning Agents.

Training and education - It’s back-to-school time for students, and also for the BCA. We have a great portfolio of topics and speakers in our Fall Webinar series – two in October and one each in November and December. Our October 3rd webinar on building envelope commissioning complemented the recent publication of ASTM’s “E2813 - 12 Standard Practice for Building Enclosure Commissioning.” The other three webinars will provide solid examples and lessons learned on Monitoring Based Commissioning (MBCx), sequence of operations, and trend data analysis.

The BCA’s five-day intensive course on leading the new construction commissioning process (taught in partnership with the University of Wisconsin) will be held again in December in Florida. For more information, check out the Events page on your BCA website.

Elections - BCA elections are coming up at the Chapter and the International levels. Remember that this is a chance to be involved in and help lead the changes in our dynamic industry. Look for more information on elections in November, and please vote!

Next Actions - The BCA’s biggest challenge – and opportunity – is to continue to promote and support momentum around certification, standardization and training. Alignment and collaboration are building across the nation and the industry is engaging with the Department of Energy, AIA, ASHRAE, ASTM, IAS, NIBS, NFPA and others to help us make progress toward achieving the vision defined in our position paper.

Wishing you a healthy and productive fall season,

Sincerely,

Mark Miller, PE, CCP
BCA President
1. How did you get involved with commissioning? What drew you to it?

A: I came up through a pipefitter and steamfitter track working in heavy refrigeration. We needed to check and double check everything at every step. Even before I got into commissioning I was always involved in startups for facilities that had to be built to the ISO9000 standards, which came out of Department of Defense quality standards. I worked mostly on the commercial side and a little industrial with customers like major superstores in the grocery field – the Krogers and the Safeways, for example. I was involved in the very first superstores in Houston. Eventually the owners wanted their buildings to be LEED certified, which required commissioning. I went to the 2003 NCBC conference in Palm Springs to see what “formal” commissioning was all about, and so I’d know what I was talking about with owners. I learned a lot at that conference, and the BCA looked like the place to go for information and people with real hands-on building experience. So I got involved.

2. So now you are retiring – sort of? Over your years in the buildings industry what do you think owners would consider the biggest advancements in building construction?

A: It was absolutely the coming of the computer age and building automation systems. We were able to check and track how systems were working. I think this helped bring commissioning to the forefront. And the modernization of building systems and advanced controls now takes a highly trained technical person to do the work. It’s not simple.

3. What do you think will happen in field of commissioning over the next 10 years?

A: I think commissioning agents will be overwhelmed by the needs of owners and I’m concerned about the industry having enough technicians. We have really good engineers, but there is a real lack of technical people to support the engineering with verification in the field. Not just the Green Building Council and LEED, but also “High Performance” buildings whether they’re certified or not. Commissioning needs to go deeper and owners are recognizing the importance of properly commissioned buildings. With today’s complex systems, commissioning people need to get with the owner early on, during design development. They need to encourage owners to put together their maintenance staff early, too, which makes the learning curve easier and makes sure the building performs well.

4. What’s your take on having enough providers to do the work in the USA?

A: This is a big challenge… we’ve talked about this a lot in board meetings. We don’t have enough providers and we need to get with community colleges, technical colleges and other training programs. Institutions need to be aware that there’s an important place for them to develop a curriculum for the commissioning industry, and we need to build support for getting the young people into the field. This is a vast area of growth potential and good jobs that last a lifetime.

5. What would you recommend to people just entering the field?

A: Listen. Pay attention. Look for the details. Commissioning is all about verifying and documenting the details. Be willing to listen and learn, and take a hands-on approach. Look for good providers who can be mentors – they know how to develop young people.

6. How would you go about attracting new talent to the field?

A: Training programs – government programs like the DOE and major providers like Horizon – need to go to the high school level and introduce students to the concept. A lot of kids in high school aren’t necessarily going to go to college but have the potential to be excellent technical and field agents. Commissioning offers these kids the possibility of ensuring their livelihood. Universities and colleges also need to put together programs that attract students.

[We also discussed the potential of developing commissioning manpower in the military which]
could be a good resource for new talent, especially since many young people enter the military without job skills and the military is now requiring new and existing facilities to be commissioned].

7. **You have served on the Board, and served as both the President of the International Board and the Southwest Chapter. What do you find the most rewarding part of being a Director?**

A: Meeting the different people. I was not only the first President of the Southwest BCA Chapter, but also of the International Board. The two most rewarding things were the friendships with people all over the country and parts of the world, and the overwhelming knowledge these folks bring to the organization and how they work together. They all work well together, they’re very committed, really knowledgeable and enthusiastic. The BCA has grown (I was Member #374, now we’re up to almost 1200 – I see it keep on growing. It’s definitely the top commissioning association in the country. I plan to stay involved with the BCA even though I’m retired, and will continue to gain perspective on the industry through the BCA and communicating with members.

8. **As our second Emeritus member what do you think others gain by remaining active in the association?**

A: Knowledge gained from associating with other members. The BCA does a lot of work to try to communicate with members and there’s always more to learn. There are lots of ways to be active – monthly meetings eyeball to eyeball, gatherings that bring speakers to a lunch event or discussions with architects, engineers and other related professionals. We’ve had owners come in to speak or listen…some were very knowledgeable and we ended up knowing more, and others came in knowing nothing and leaving with information they could use. Volunteering is hard, everyone is busy, but this is a volunteer organization – giving back is important, and the more time you can put into it, the more you get out of it.

Also commissioning professionals gain knowledge of new opportunities. There’s a huge need for commissioning in the US, and also other places around the world – Asia and Dubai, for example. I did a presentation in Hong Kong one year at the Southeast Asia conference where they’re pretty active. But the main thing is keeping up good communication – even with the best documentation, the best people and the best tools, active communication is what makes it worthwhile to be involved.

9. **Do you have plans for your retirement?**

A: Well, I’ll be playing golf. I’ll be able to harass my kids and nine grandchildren. I even have a great granddaughter now. I may do some consulting part time, and I’ll stay involved in the BCA. My wife is still working and will be for another couple of years. So I’ll be chillin’…

Seems like the right thing to do for a man who started out in heavy refrigeration…!
Commissioning professionals are well aware of the demand for experienced practitioners who can provide high-quality services that ensure buildings operate efficiently and perform as designed. Most commissioning experts will attest to the fact they gained their expertise on the job, without the benefit of formal commissioning training. While the tenacity of these experts is admirable and the value of on-the-job training is significant, the increased demand for seasoned commissioning professionals means that this approach is no longer sufficient. Yet, historically, there has been little opportunity for junior professionals to develop and hone their expertise through high quality, learner-centered industry training.

BCA Partners with PECI to Launch Comprehensive Commissioning Curriculum

For nearly three years, BCA has been working in partnership with PECI to support PECI’s development of an innovative commissioning curriculum. Relying on the guidance and insight of BCA leadership and the skills and expertise of BCA members, PECI, in partnership with the New Jersey Institute of Technology, has developed a commissioning curriculum that provides participants with rock-solid understanding of the commissioning process and far-reaching technical knowledge of building systems and equipment. Participants who complete the training will be equipped to apply deep analytical skills to hands-on commissioning activities.

The unique training program employs a blended learning strategy, combining on-demand e-learning with in-person laboratory instruction. This combination, along with the ability of participants to control the time, location and pace of instruction, is intended to provide a flexible, immersive training experience that can meet the preferences of adult learners. In an era of demanding work environments and limited budgets, this approach minimizes travel costs and time spent attending training during business hours.

BCA’s role in the development of this program was significant, including:

- Providing insight and analysis to the needs assessment and job task analysis that informed the curriculum design
- Providing subject matter experts to develop and review content
- Advising on marketing and outreach activities
- Facilitating industry connections and collaborations with BCA’s partner organizations
- Providing overall project feedback, guidance and support

Thanks to BCA’s significant contributions to this ambitious project, the new curriculum reflects the gold standard of commissioning practices and equips participants with skills and knowledge necessary to gain professional mastery. Going forward, PECI and BCA will continue to work together to promote and enhance the program. Plans are underway to creatively leverage BCA’s subject matter experts and credibility in the industry to ensure the training program provides excellent value and results for participants.

This endeavor was funded by US Department of Energy, with additional financial support provided by New York State Energy Research and Development Authority, PECI, California Energy Commission, Northwest Energy Efficiency Alliance and the California Commissioning Collaborative.
Along with the Commissioning Authority curriculum, a course of study for Commercial Energy Auditors was also developed. The primary target for these programs is junior to mid-level professionals with a background in engineering or relevant technical experience.

Individual courses will also be available for those seeking continuing education credits. In aggregate, the training programs offer more than 120 lessons, culminating in hands-on laboratories designed to ensure essential skills are mastered. The program is set to launch later this year. For more information, email learn@peci.org. And stay tuned to the BCA Newsflash and future issues of the Checklist for important program updates. ▲
CCP & ACP Updates

The BCA congratulates the following individuals on achieving the Certified Commissioning Professional (CCP) and Associate Commissioning Professional (ACP) designation:

CCP:
Brian S. Annicharico PE, CEM, LEED AP BD+C, CCP
C&S Engineers, Inc.
Syracuse, NY

David Braun CCP, P.Eng.
Enermodal Engineering
Kitchener, ON, CAN

Benjamin Burgoyne CCP, LEED AP, EIT
Ebert & Baumann Consulting Engineers, Inc.
Washington, DC

Brian Schwartz LEED AP BD+C, CCP
Burns & McDonnell
Bloomington, MN

Amir Tarazy P. Eng, CCP, LEED AP BD+C
Stantec Consulting
Dartmouth, NS

ACP:
Kevin Bowens ACP
Hood-Patterson and Dewar
Addison, TX

Nate Goodell PE, ACP
TAITEM Engineering
Ithaca, NY

Erik M. Jost ACP
Erickson Living
Wilmington, DE

John B. Manovich ACP, QCxP
Comfort Systems Energy Services
Little Rock, AR

Don Meyer ACP, LEED AP
Keithly Barber Associates
Issaquah, WA
Join the BCA Today  Save on Membership through 2013!

As an active colleague in the commissioning industry, the Building Commissioning Association (BCA) invites you to join and take advantage of opportunities available only to members for networking, continuing education, business-building, new tools and resources, and having a real voice in setting standards for the future of your industry.

The BCA was established to provide best practices training, resources, networking and advocacy that foster excellence and advance recognition of the commissioning practice. Today the BCA is a regional, U.S. and international organization that includes commissioning professionals, building owners, architects, engineers, construction managers, and advocates working together to build a better industry.

Every year since its establishment in 1998, the BCA has undertaken challenging initiatives to represent you and your profession at the national, regional and local level. We now produce the National Conference on Building Commissioning, the nation’s longest-running commissioning conference.

In 2012 the BCA also accomplished these major milestones for your profession:

- Published Best Practices for New Construction Commissioning
- Developed an existing building commissioning training curriculum for the state of New York
- Partnered with PECI to develop commissioning authority training that combines on-demand, e-learning with in-person laboratory instruction.
- Released a position paper on the Qualifications of a Commissioning Professional

The BCA Board and staff are working with industry stakeholders to define how commissioning should – and should not – be written into building codes. We are working with national leaders every day to ensure that commissioning training and certification will meet the diverse needs of the built environment, now and in the future.

You, too, can help to shape the future of the commissioning industry. Today, your annual individual membership fee of $230, or corporate membership fee of $600 will entitle you to full membership for the rest of 2012 and through the end of 2013. Find out more about what the BCA can do for you, and join today! It’s fast and easy through our website, www.bcba.org.

Primary Integration Solutions, Inc. (P-Solutions) is an independent, industry-certified, 3rd party commissioning authority (CxA) with a concentrated focus on the commissioning and operational sustainability of “Mission Critical” facilities.

Our capabilities offer complete services, from initial planning stages, to design, through construction and ongoing operations of mission critical facilities. Our clients range from financial institutions and investment banks to some of the largest telecommunication companies in the world to top-secret government agencies.
Call for Abstracts

Every Spring for 20 years the NCBC has served as the pivotal forum for stakeholders in building commissioning. Starting with a handful of committed engineers and researchers, this conference has continuously vitalized the building performance industry, providing the meeting place for industry colleagues from the commissioning, A/E/C, operations, energy and real estate professions to define tomorrow’s tools and standards of excellence.

From leading experts to newcomers, NCBC is where the commissioning industry meets to discuss state-of-the-art developments and trends. This event is a singular opportunity to expand your knowledge of commissioning and contribute to a more sustainable future.

Whether you are an engineer, architect, service provider, owner or energy expert we invite you to share your skills and experience in commissioning for new and existing buildings by speaking at this year’s conference.

If you would like to submit an abstract for next May’s NCBC event, download the abstract form from the home page of, www.bcxa.org and submit it via email by November 16, 2012. If you have questions or concerns, please contact Sheri Adams at 971.245.6068 or sadams@bcxa.org.

2013 Tracks Include:

Introduction to Commissioning
For people new to the industry, these sessions focus on case studies and an overview of key issues in commissioning and retrocommissioning.

Business and Legal Matters
Recommended topics include the financial and business aspects of commissioning projects, how to communicate among team members, commissioning certifications, codes and standards, insurance and liability, commissioning software, training and contracts.

Innovations: The New Frontier of Commissioning
Dedicated to the latest developments in the world of commissioning, such as cloud commissioning software and wireless technologies.

Advanced Technical Track
In-depth technical sessions with topics such as building envelope, measurement and verification, HVAC controls, and daylighting controls.

Technology Showcase
This track is intended for product demonstrations and is the only track where commercialization of products is permitted. Attendees have asked to learn about the newest equipment and products available in high performance buildings and we want to provide the right platform for these presentations. Speakers will also be required to purchase a both at the Exhibit Show.

Additional Ideas? Do you have a topic you think we should cover but not listed above? The committee is open to hearing your ideas.

Speaker Requirements
Accepted authors will be notified in early January 2013. In exchange for receiving a reduced conference registration fee, all speakers are required to:

• Submit a finalized synopsis of your presentation by February 1, 2013
• Submit your complete presentation by April 19, 2013
Whether your facility is new or existing, McKinstry’s commissioning services are your guarantee of exceptional building performance from the beginning and over the long haul.

For nearly two decades, we have provided commissioning services as a vital component of our integrated project delivery process. This expertise enables us to support clients in the design, construction, operation and maintenance of superior facilities that keep tenants comfortable and bottom lines strong.

Superior building performance starts with superior commissioning
Many utility companies across the nation are including commissioning requirements in their customer energy efficiency programs. Commissioning is in the best interest of utilities and their customers, because customers can achieve higher energy savings and utilities must meet stated energy savings goals.

How do utility programs work?
Utility commissioning programs vary. If you’re looking for opportunities, it’s a good idea to become familiar with the specific program requirements before contacting the utility. Some are designated for existing buildings, others include new and existing buildings, yet others are for new construction only. Some utilities offer incentives within a commissioning program, and others embed commissioning into requirements under a broader energy efficiency program – or both. Utility programs can require owners to incorporate commissioning for whole buildings, or only for energy-using equipment.

Do you qualify?
In most cases, service providers must be pre-qualified by the utility. In all cases, though, utilities look for a well-documented process and phased deliverables such as preliminary assessment, investigation report, verification plan and final report upon project completion. Check out your local utility websites to find out about program rules, customer eligibility, and how to get listed as a qualified provider.

How do you get paid?
Of course, it’s critical to understand the details in your commissioning contract. Some utility programs offer project incentives directly to commissioning professionals, and others offer incentives to building owners who then contract directly with providers.

Typically, the commissioning fee is paid out at intervals during the process. The first increment is often paid after the initial investigation and documentation of deliverables is accepted by the utility. After the customer implements the agreed building or systems plan, the provider verifies the work and delivers energy savings calculations and final project documentation. The final payment is based on the contract terms; for example, there may be penalty or bonus clauses based on timelines and savings, or pay-for-performance requirements.

Utility programs around the country:
Today’s economic climate has increased awareness of energy efficiency in existing buildings and slowed the growth of new construction. As a result, retrocommissioning (RCx) practices are often included in utility program portfolios. Here is a sampling of different kinds of current programs in regions across the country, with links to useful information and/or case studies:

Southwest
- Arizona Public Service Energy Efficiency Solutions for Business
  This utility maintains a list of “trade allies” who have attended a program introductory seminar, but it does not recommend, qualify, or otherwise approve service providers for participation in the Solutions for Business program. RCx is paid at nine cents per kilowatt hour saved up to 75% of incremental cost (up to $20,000).

Central and Southeast
- Centerpoint Energy RCx Market Transformation Program
  This program promotes the tune-up of major energy-consuming systems in existing commercial buildings, including manufacturing facilities, hospitals, educational campuses, and retail stores. Customers can receive incentives of $25 per kilowatt and one cent per kilowatt hour for verified savings, based on eligible implementation costs, up to $10,000 maximum. http://www.centerpointenergy.com/staticfiles/CNP/Common/SiteAssets/doc/2012_CNP_RCx_Program_Presentatation.pdf (be sure to see Slide #18).
Midwest

• Focus on Energy – Wisconsin
  This RCx Program takes a holistic approach to building performance by targeting building systems, energy-using equipment, and operating schedules, optimizing how they work together. The program offers incentives to customers for RCx studies and for implementation of qualified energy-saving measures. Incentive levels are eight cents per kilowatt hour and 50 cents per therm of energy saved. The next RCx Service Provider RFQ is planned for early 2013. http://www.focusonenergy.com/Business/RCx/

• ComEd
  For ComEd's RCx program, the owner must commit to spend a minimum of $15,000 to $30,000, depending on project size, on implementation of identified measures with an estimated simple payback of 18 months or less based on electrical savings. For Monitoring-Based Commissioning, the facility owner is required to install monitoring software and to contract with an approved provider for a study period of at least 18 months. Facility owners must send one facility staff member to Building Operator Certification training. https://www.comed.com/Documents/business-savings/case-studies/RetroCommiss_AlexianBrothers_CS.pdf

California

• Southern California Edison Commercial RCx Program
  SCE's program offers technical and financial assistance for RCx services to commercial customers. Commissioning authorities must be qualified by submitting an application and taking SCE program training. They are paid directly by the utility for approved projects, providing building screening and scoping; customized investigation of building operations; phased commissioning services and documentation; and training on improvements. http://www.sce.com/CaseStudies/casestudies.htm

Northeast

• Long Island Power Authority Commercial Efficiency Program
  Projects that receive funding under this broader commercial program may be eligible for cost sharing for building commissioning. LIPA will co-fund commissioning services through a qualified “Technical Assistant” firm that has specific experience in systems and whole building commissioning. The payment structure is determined on a case-by-case basis, and generally is for (a) projects whose incentives are expected to exceed $50,000, (b) projects that are participating under the Whole Building Design Approach, or (c) for LEED Green Buildings. http://www.lipower.org/commercial/efficiency/commercial-case.html

When considering utility-supported Cx/RCx, remember this:

1. Commissioning professionals can bring projects to the utility on behalf of owners, or assist owners in defining utility-focused project details.

2. Look for utility-supported opportunities not only in direct commissioning programs, but also in broader programs that have embedded commissioning requirements.

3. Be sure you understand the owner’s commitments, the utility program requirements, and how your fees will be determined and distributed.