Minnesota Chief Engineers Guild

December 2012



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A MESSAGE FROM THE PRESIDENT

Fellow Members:

Thanks to all of you that attended the annual conference in September—we had a great turnout, with wonderful educational and networking opportunities. It is exciting to see our events grow, and attendance increase. Our next event will be our Quarterly Meeting, to be held December 6, at the Minnesota Veteran's Home in Minneapolis.

This actually is the facility where I work, and at the meeting, we will profile a major construction project that has recently been completed at our historic site, including a tour. I look forward to seeing you all there.

Best Regards,

Howard Berny President

Upcoming Meeting Dates

Quarterly Meeting

December 6, 2012 Minnesota Veteran's Home, Minneapolis

Quarterly Meeting

March 13, 2013 Golden Valley Country Club, Golden Valley

Quarterly Meeting

June 12, 2013 Majestic Oaks Country Club, Ham Lake

Dollars for Scholars Golf Classic

June 12, 2013 Majestic Oaks Country Club, Ham Lake

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Quarterly Meeting To Be Held December 6

The next Quarterly meeting will be held on December 6, 2012, and the Minnesota Veteran's Home in Minneapolis.

The meeting will include a presentation and tour of the newly remodeled Building 19. You will hear about the project details, and benefit from lessons learned during this massive remodeling and upgrade project at a historic facility.

AGENDA

9:00-9:15am	Registration
9:15-9:30am	Business Meeting
9:30-11:00am	Presentations: Horty Elving, Architect; Adolphson and Peterson, General Contractor and Howard Berny, Owner Representative
11:00-11:30am	Tour
11:30am	Lunch, provided by Horty Elving and A&P

Quarterly meetings are at no charge for MnCEG members, but you must pre-register. Go to <u>www.mnceg.org</u> for more information. Directions and parking information is also available on the web site.



If you would like to present at a future quarterly meeting, or the annual conference—or, if you have any suggestions for presentation topics, please send them to <u>office@mnceg.org</u>, or contact <u>Jim</u> <u>Nieswaag</u>, education committee chair.

Annual Conference Brings Big Attendance

The 2012 Minnesota Chief Engineers Guild Annual Conference and Trade Show was held on September 5-6, 2012, with member



MnCEG 2012 Conference & Trade Show

attendance that was up over last year. Typically, the conference has been held in the Brainerdlakes area, but this was the second year it was held in St. Cloud with a slightly shorter format. The new format allowed for members to attend for just a day—or the entire conference—which allowed for attendees to choose the day(s) that best fit their schedule.

The conference kicked off with keynote speaker David Horsager, who kept attendees engaged for the morning with his presentation of "The Trust Edge." After lunch, attendees had the

opportunity to participate in a breakout session. The trade show was held later in the afternoon, and attendees were able to visit the exhibits to see the latest and greatest in products and services for facility managers. The day concluded with the conference banquet, where scholarship contributors and recipients were recognized, After the banquet, a Dollars for Scholars fundraising event was held to help support our scholarship fund.

Friday morning started out with department breakouts for DHS, Corrections and MnSCU, and more breakouts followed. After lunch and a business meeting, all those in attendance joined for a roundtable discussion. The day, and conference, concluded with prize drawings. Thanks to all who attended, exhibited and presented—for making the 2012 Annual Conference a huge success!



DOES YOUR BUILDING NEED A TUNE-UP? Building Commissioning: Big Potential for Big Savings

By: Hallberg Engineering, Inc. Rick Lucio, P.E., LEED[®] AP Vice President, Mechanical/Commissioning Department Manager 651.748.4386, RLucio@HallbergEngineering.com

The capabilities of mechanical and electrical systems are truly amazing. Building owners now have the opportunity for more flexibility, reliability, and control in their systems than ever before. But these opportunities can easily be lost if systems are not fully operational and maintained.

One solution to this problem is "commissioning": a verification that systems are functioning properly and facility operators understand the operation and maintenance of the systems. Commissioning can be applied and beneficial to both new and existing buildings.

New Buildings: New building commissioning (Cx) begins during design and continues through construction, occupancy, and operations with the goal of ensuring that the new building operates as the owner intended and building staff are prepared to operate and maintain the new systems and equipment when first installed.

Existing Buildings: Existing building commissioning is performed with the goal of improving a building's operations and maintenance procedures to increase overall building performance and to identify possible issues that may have occurred during design or construction or that may have developed during the building's lifetime. This may often eliminate the need for costly capital improvement by minimizing quick-fix solutions. Retro-commissioning (RCx) is applied to a building that has never been commissioned before. Recommissioning is applied to a building that has previously been commissioned, but has a need for being commissioned again.

What can commissioning do for your facility?

- ✓ Improve system operation
- ✓ Lower energy costs
- ✓ Reduce maintenance, troubleshooting, and repair costs
- ✓ Extend the life of your equipment
- ✓ Improve indoor air quality
- ✓ Improve occupant comfort and productivity
- ✓ Reduce the life cycle cost of your facility
- ✓ Improve installed building systems documentation

What building systems are typically commissioned?

- 1. Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR)
- 2. Compressed air
- 3. Plumbing
- 4. Energy Management Systems (EMS)
- 5. Building Automation Controls (BAC)
- 6. Power distribution and emergency power
- 7. Lighting
- 8. Motors
- 9. Fire suppression
- 10. Communications
- 11. Alarm systems







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The following are examples of the types of deficiencies a commissioning agent can find within your facility's systems.





Missing components

Accessibility issues

If your facility has never been commissioned, or was not properly commissioned to begin with, you could be spending more money than necessary on energy, maintenance, and repair costs. The long-term value of building commissioning far outweighs the immediate financial costs. Studies have shown that building commissioning projects typically have a payback period of 1-3 years as a result of avoided energy and operations costs.

Want more information on building commissioning?

The following organizations offer additional information on building commissioning for new and existing buildings. Recommissioning study costs can also be rebated by local utilities.

- AABC Commissioning Group (ACG): The AABC Commissioning Group (ACG) is a non-profit association of certified commissioning authorities, dedicated to the advancement of professional, independent commissioning services through education, training, and certification of qualified architects and engineers. <u>http://www.commissioning.org</u>
- Building Commissioning Association (BCA): A non-profit trade association for individuals and companies interested in building commissioning. The BCA seeks to enhance quality standards by developing best practices and educational programs. http://www.bcxa.org
- National Clearinghouse for Educational Facilities (NCEF): The NCEF provides information on designing, building, and maintaining safe, healthy, high-performing schools. Among its 21,000 resources is a substantial list of documents and websites regarding school building commissioning. <u>http://www.ncef.org/rl/commissioning.cfm</u>

Xcel Energy Recommissioning Program: Xcel Energy's Recommissioning Program gives businesses in Colorado and Minnesota the opportunity to earn rebates and save up to 20% on building energy costs.

EVEN IF YOU COULD WALK YOUR BUILDING BLINDFOLDED, AN ENERGY ASSESSMENT MIGHT OPEN YOUR EYES.

There's no question that you're the expert on your facility. But our energy efficiency specialists can look at it in a new way, point out areas for improved energy efficiency, and then connect you with money-saving Xcel Energy rebates to offset your up-front costs.

Visit ResponsibleByNature.com/Business today for details.



http://www.xcelenergy.com/Save Money & Energy/For Your Business/Energy Audits & Studies/Recommissioning - CO, MN

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MnCEG Scholarship Program

This year \$8000 was awarded in scholarships as part of the Minnesota Chief Engineers Guild Scholarship Program. This program provides scholarships for individuals enrolled in post-secondary educational institutions. Scholarships applications are accepted during the summer, and awards are made each fall, with the official announcement made at the MnCEG Fall Conference.

The Scholarship Program is funded through events and contributions. The primary fundraiser is the annual Dollars for Scholars Golf Tournament, held in June each year. Money is also raised at an event at the fall conference. All proceeds from both of these events go directly to scholarships.

Contributions are also an important source of funding for the program. Every year the MnCEG Board contributes an amount from the general fund, based on fund balance. Individual contributions are greatly appreciated, and this year, contributions were received from:

Inspec	Hiller Commercial Floors		ScanAir
	Xcel Energy	Steve Udell	

Contributions are accepted throughout the year, and can be sent to the MnCEG office. Providing these scholarships is a primary goal for MnCEG, and a way for all members to "pay it forward."

This year, three associate members sponsored the Games For Grades scholarship fundraiser at the annual conference:

Uhl Low Voltage Contractors Inspec

Please consider any kind of participation in the fundraising events, or other support, that is best for you.

Scholarships were given to 15 student applicants in 2012, in fields ranging from medicine and business, to engineering and graphic design. Applications are accepted in the summer...watch for more information.



Building the Future Together

In the Land of 10,000 Lakes, you don't have to look far for ways Burns & McDonnell influences higher education. From classrooms to science labs to central utility plants, we provide the sustainable solutions through engineering, architecture and building commissioning services that optimize our resources and lead to project success.

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Performance Contracting "Best Practices" trends

- Learn about the NEW Minnesota GESP What's new, what technical and financial assistance is offered, and how can it be leveraged to achieve energy savings in your facilities
- Review the Process Project Development, Funding and Financing Options, Incentives and Standardized Measurement and Verification Procedures
- Learn from your Peers Open Discussion with a Panel of Public Owners highlighting ways to create a "win-win-win" scenario with Guaranteed Energy Savings Projects

This Workshop will demonstrate the "how to" for upgrading your facilities using deep retrofits, without capital appropriations paid from guaranteed cost reductions. Nationally Recognized Speakers will be deliver key information. Food and refreshments will be provided throughout the day. To register, go here, or contact Eric Rehm at 651-296-6446 or eric.rehm@state.mn.us with any questions.

Educational Workshop on Minnesota's Guaranteed Energy Savings Program

Minnesota Chief Engineer (MnCEG) members are invited to attend the upcoming ESC - MN Chapter Educational Workshop -Minnesota's NEW Guaranteed Energy Savings Program to be held December 7, 2012.

The half-day educational workshop is be hosted at the Xcel Energy Headquarters at 414 Nicollet Mall, Minneapolis, MN 55401 from 9 AM - 3 PM.

THE EVENT IS FREE TO ALL PUBLIC SECTOR EMPLOYEES

The Educational Workshop is being presented in collaboration by the ESC - MN Chapter, the Minnesota Department of Commerce, and 11 local Energy Service Companies. The purpose of the workshop is to learn from your peers - public building owners and leading energy efficiency experts!

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