DCEO NEWS

2013-2014 PUBLIC SECTOR ENERGY EFFICIENCY GUIDELINES RELEASED
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Highlights

• Sweet Deal special bonus of 10% for all final projects submitted by October 31, 2013
• Sweet Deal special bonus of 5% for all projects completed by February 14, 2014
• Qualifying incentive is limited to 75% of the Total Project Cost (before Sweet Deal Bonus)
• Total Project Cost = cost to purchase + install the qualifying measures including labor costs
• Double-Up Natural Gas Incentive continues in the Standard and Custom Programs; Custom Incentive is $3 per therm reduced

PUBLIC SECTOR NATURAL GAS BOILER TUNE-UP PROGRAM

The Boiler Tune-Up Program encourages the owners of natural gas boilers to invest in a Boiler Tune-Up conducted by a qualified contractor. The Boiler Tune-Up should result in up to 6 percent efficiency gain in the operation of the boiler resulting in payback periods in most cases of less than six months.


NEWS

RCX UNCOVERS BAS OPERATIONAL FAULTS

SEDAC has been involved with retro-commissioning several facilities around the state of Illinois. “Existing building commissioning, also known as retro-commissioning (RCx), is an event in the life of a building that applies a systematic investigation process for improving and optimizing a building’s O&M.” 1 While retrofitting involves replacing outdated equipment, RCx focuses on optimizing the operation of equipment already in place.

Many of the most common problems in facilities that SEDAC has examined relate to the performance of centralized building control systems. These systems are referred to in the industry using a wide variety of acronyms including: building automation and control systems (BACS); building control systems (BCS); building management systems (BMS); Energy Management and Control System (EMCS); and building automation systems (BAS). Designed to monitor and control a building’s mechanical, electrical, and plumbing (MEP) systems, BAS are computerized networks of interlinked electronic devices run by complex computer programs.

To help identify operational problems, SEDAC frequently uses data collected from BAS (including temperature setpoints, equipment operating schedules, trends, and more), along with data captured by sensors deployed by SEDAC. A very important function of BAS, directly related to energy efficient operation, is to communicate to equipment when to turn on and off. In several RCx projects SEDAC has discovered that operational schedules in the BAS are either not programmed, programmed incorrectly, or are programmed but not being followed by the scheduled equipment and/or systems.

Sometimes scheduling issues are simple to resolve, however, when mechanical equipment is not following associated schedules in the BAS, achieving resolution can be tricky. Is the disconnect between the mechanical system operation and the BAS schedules a communications problem? A hardware issue? A programming problem? A combination? Finding the problem is the first step; identifying the cause(s) and resolving the problem is the challenge. Resolution usually involves a team effort between a BAS contractor, equipment suppliers/manufacturers, and building operators. Other problems that SEDAC has discovered during RCx efforts include inappropriate setpoints, variable frequency drives that have

1 A Practical Guide for Commissioning Existing Buildings, Haasl and Sharp 1999
not been programmed, over-ventilation of spaces, and malfunctioning or failed equipment.

BAS are supposed to provide building operators the means to control complex MEP systems. Most BAS systems are complicated, difficult to navigate, require operator training, ongoing/regular scheduling, updates, and fine-tuning. Unfortunately, faulty operations in a BAS may not be obvious—if comfort conditions are being maintained during occupied hours. No one is typically in a building to notice when and how the system is running after hours. Thus no one questions their operations while MEP systems unnecessarily consume tens of thousands of energy dollars.

If your building has a BAS, don't assume that it is functioning properly. RCx will help identify if it is or is not. For the ninety RCx projects that SEDAC has conducted, median identified savings per facility is $68,000 which represents 16% utility savings with a 1 year simple payback.

Public Sector projects may be eligible for SEDAC’s Public Sector RCx program: http://smartenergy.illinois.edu/retro-commissioning.html

Private sector projects should see your utility provider:

LIMITED OFFERING OF PUBLIC SECTOR RCX – APPLY TODAY!

Is your building staff stretched thin fighting maintenance fires? Is your O&M budget more than tight? Retro-commissioning building energy systems addresses these concerns and lightens your load. Public sector RCx is a great way to leverage your building staff’s limited time with state sponsored analysis and guidance. We understand that you have a lot going on, and we want to help with that. For every hour that you spend with us, we put in many hours back at the office coming up with a focused plan for savings. We find the easy money, high impact projects which allow you to start accumulating savings and establishing comfort as soon as possible, and be less on-call to the complaint line.

SEDAC’s grant from DCEO is renewed annually with no guarantee of future funding, so ACT NOW to make use of available funds for your RCx project.

Submit a Notice of Interest today at RCx.sedac.org
Questions: rcx@sedac.org

SEDAC CLIENTS COMMENT ON RCX

“Occupants are more comfortable; complaint phone calls and emails have gone down to a trickle. When you don’t get the complaints, it works. We have comfort and we are not spending vendor money [to achieve it].”
Kevin Hauser, Director of Facilities, Antioch School District 34.

"SEDAC’s professionalism, follow-through, mechanical expertise, problem-solving, and equipment payback calculations have been incredibly helpful. The program lit a fire under our staff and partners to pull in the same direction to make our campus more energy efficient. SEDAC is a true asset and I recommend their services wholeheartedly." 
John Brophy, Sustainability Manager, City Colleges of Chicago.