



Spring 2006

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In Control! *Effective Management* *of Your Facility*

No Energy Plan for Your Building? *Start with a look at five key areas.*

With the cost of energy at historic highs, businesses ranging from small companies to the Fortune 500 face unanticipated, costly energy bills. As rates have increased, there has been a renewed interest in facilities' energy statistics. Long the strict province of the property manager, these "vital statistics" have become of interest to top management, property owners, building occupants and service providers alike. The reason? All now have a financial and strategic interest in an organization's energy use and efficiency.

Due to fluctuating costs, government entities, private companies and corporations alike must take a strategic approach to energy resource planning. But if your organization has no current energy plan, where do you start?

- 1. Evaluate your facility's current energy usage.** Is your building optimized to meet its current occupant requirements? Is the building temperature comfortable to work in? Does it run at full capacity during work hours only? Or, does your facility have hot and cold zones, while running full power on a 24-hour schedule? To find out, have your building engineer or an outside consultant conduct an energy audit.
- 2. Check your facility's energy consumption for the past 12 months.** Once a baseline is established with the facility's current energy use, you can track consistent statistics to measure and evaluate the building's energy consumption. Now, you're able to pinpoint specific expenses. Energy measurement is an ongoing, cost-efficient conservation tactic. It allows the facility manager to assess and adjust energy use as an ongoing business process. Are you taking care of your current facilities? Your system, your building controls—they should be well cared for, cleaned and maintained so they are running at full capabilities.
- 3. Do you have the correct building technology and product technology in your facility?** Upgrading equipment may seem to be too much of a cost outlay while a facility manager is struggling to finance the facility's current energy needs. However, new progressive technologies and equipment often pay for themselves in three to five years. Investigate and see if there are opportunities for a new technology or product introduction that make sense to your business.
- 4. Institute new workplace action policies.** Simple changes, such as a no-idle policy on trucks, or workstation power-down rules, can make a big difference in a building's monthly energy expenditure. Ask for your tenant's or employees' participation and let them know how they are contributing to, and benefiting from, the energy savings.
- 5. If your facility does not have an energy plan, develop one.** Just as a marketing or sales plan is crucial to an organization's success, so is an energy plan. An energy plan will help an organization long into the future, reducing exposure to high energy bills, cost volatility and supply shortages. For additional tips on getting started on a strategic energy plan, [click here to read last July's article in Eye on Building Technologies.](#)

At Siemens Building Technologies, the Energy and Environmental Solutions group works with clients from all sectors of the economy—schools (K-12 and higher education) commercial buildings, healthcare and laboratory facilities and federal, state and local governmental buildings. Siemens works with organizations to implement measures that reduce energy costs, increase energy efficiency and optimize building performance. For more information on developing a customized, strategic energy plan, contact Control Management, Inc. at (803) 765-9070.

Training Schedule



Our in-house training courses are based on different skill levels. Whether you need to get a new employee familiar with your Siemens system or help your current system operator reach their most productive skill level – we can meet the needs of your entire staff. Enrollment is “first come, first serve” and classes fill quickly.

If you are interested in our training courses and have not received a training directory, please call Ernie Glenn at CMI, **803-779-6050 ext 411** or visit our website, **ww.controlmanagement.com**, for more information. We look forward to seeing you in upcoming CMI training classes!

TEC-101 *Insight for New Users - Part 2: TEC's – Terminal Equipment Controllers –*

Learn how TEC's control building equipment and communicate with field panels, communicate with the field panel using Controller Interface Software (CIS) or Datamate, communicate with a TEC from the room thermostat using a laptop, and through the field panel or Insight.

Class Date: May 24, 2006

AIG-202 *Insight for New Users - Part 3: Reports, Trending & Scheduling –*

Learn to create, display, and print various reports; trending (data stored when a change of value or time occurs); schedule equipment, run times, trends, and reports and much more, all through graphics.

Recommended prerequisite: AIG-101.

Class Date: June 14, 2006

AIG-101 *Insight for New Users - Part 1: Introduction*

Learn the basic operations of the system for day to day use through graphics. *No recommended prerequisites.*

Class Date: July 19, 2006

** Dates for June and July classes subject to change. Please check our website (www.controlmanagement.com) for dates before registering.*

PC Corner



Does this sound like you?

"Our Buildings and equipment are getting old"

"The occupants are complaining."

"Much of our infrastructure (Air Conditioning, Boilers, Thermostats, Ventilation, Fire / Security, Windows, Lighting, etc.), is in need of extensive renovations."

If you said yes to any of the above...You are in luck!

Energy Saving Performance Contracting (PC) is starting to make a resurgence in South Carolina. With successful Performance Contracting projects at Winthrop University and The University of South Carolina - Columbia, public agencies and private entities appear poised to take the step of making improvements to the HVAC systems in their facilities, and paying for those improvements with guaranteed energy savings.

To find out if a Performance Contract might be right for your facility(s) or organization, just answer the questions below:

1. Do you have deferred maintenance needs or capital improvement needs that you cannot seem to get funded?
2. Are you concerned with rising energy costs, and rising energy budgets?
3. Are you looking for ways to reduce your facility energy consumption?
4. Do you receive regular complaints about temperature, humidity, lighting levels, indoor air quality, etc?

If you answer yes to any of the questions above you might be a candidate for an Energy Savings Performance Contract. If you answered yes to all of questions above call us today...we can help!

Call CMI to set up a time for a no cost visit your facility. During our visit we will explain how an Energy Savings Performance Contract works, discuss your problems and goals, and let you know if you are a candidate for an Energy Savings Performance Contract. For more information, Contact Tom Dixon at (800) 848-0312.

Product Spotlight

Introducing: Adaptive Control

Siemens Building Technologies delivers the first new control innovation since Direct Digital Control

Siemens Building Technologies, Inc. is the first in the industry to offer Adaptive Control, a new, innovative way to control mechanical equipment in an HVAC system. A fundamental change in how Digital Direct Control (DDC) products control HVAC equipment, Adaptive Control technology is now embedded in all new APOGEE® field panels and also will be available as a firmware upgrade for several models of installed field panels. The result? Better cost savings and consistent, year-round control performance.

A three-year, industry-exclusive agreement with CyboSoft General Cybernation Group, Inc., a leading process industry control software developer based in Rancho Cordova, Calif., allows Siemens to use CyboSoft's patented Model-Free Adaptive (MFA) control technology.

Here's how it works: Facilities managers familiar with loop tuning know that Proportional, Integral, Derivative control (PID) has been the de facto industry standard for DDC control in the commercial HVAC business for the past 20+ years.

Although facility managers can achieve a high level of success using PID, it's also true that effectively and accurately tuning PID loops for optimal control can be time-consuming and often difficult—requiring extensive experience and/or training. In addition, loops are frequently left with factory default values, which leave room for improvement. These are industry-wide issues.

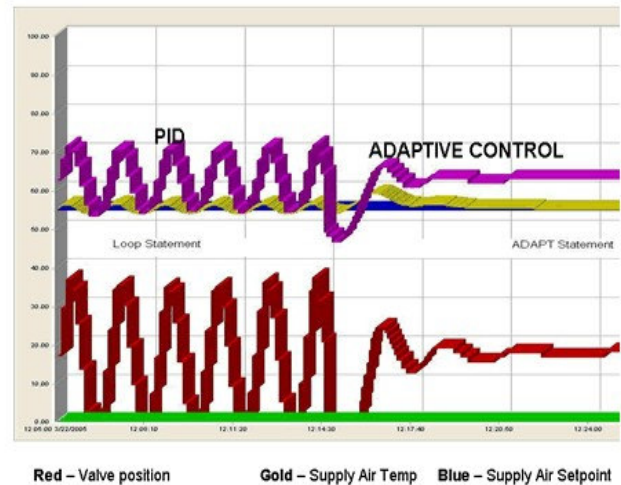
Siemens Building Technologies now has the ability to improve this process through the use of CyboSoft's MFA control software. As its name suggests, it is an adaptive control method that does not require process models. No other comparable advanced control technology possesses all the attributes of MFA. Its ability to solve difficult control problems is well known, and engineers in the industrial market continue to rely on MFA to achieve improved quality, flexible production, environmental control and cost savings.

Adaptive Control has been found to achieve excellent control results, while eliminating the need for traditional loop tuning. (See graph above.) It also continually adapts to seasonal changes, eliminating call-backs for ongoing loop adjustments.

For the facilities manager, the benefits of Adaptive Control include:

- ◆ Consistent control performance for all simple and complex loops, such as supply air temperature. The accuracy and performance meets an important need for the facilities manager in a critical environment, or in a facility that is seeking certification from the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED).
- ◆ Adaptive and accurate control without human interactions for tuning, freeing an employee's time for other tasks
- ◆ Simplified installation, reducing the time and costs of training employees
- ◆ Reduced energy costs
- ◆ Longer life for valves and actuators due to less wear and tear
- ◆ Greater ease in documenting conditions, such as verifying that a loop is properly tuned
- ◆ Greater peace of mind, as Adaptive Control has less chance for errors or malfunction, giving the facilities manager greater confidence in the continual performance of the control system

For more information on how Adaptive Control can deliver performance, accuracy and productivity improvements, contact Control Management, Inc. at 803-765-9070 or check out our website at www.controlmanagement.com.



The graph shows how an oscillating Proportional, Integral, Derivative (PID) controlled loop can automatically be brought into stable control using Adaptive Control.

Customer Spotlight

Horry County School District Myrtle Beach, SC

In 1986, Ronald Regan was president, Nintendo was introduced in the US, IBM unveiled the PC Convertible, the first laptop computer...and Control Management, Inc. began installing Siemens DDC control systems in Horry County Schools. A lot has changed in the past 20 years, but CMI's commitment to providing the highest quality of service to Horry County Schools has remained the same. Green Sea and Loris High Schools were our first projects with the school district, and 20 years later, they are the most recent jobs to be awarded to CMI...We have come full circle!

Horry County School District is a diverse, countywide K-12 school system, serving a county of about 225,000 people along the Atlantic coastline of northeastern South Carolina. With over 32,000 students attending Horry County schools in Spring 2005, the average attendance rate was 96%. With 45 schools, Horry County School District is the third largest district in the state and has gained over 8,000 students during the last ten years.

Control Management, Inc. installed the first control systems at Green Sea High School and Loris High School in 1986. By 1993, CMI was selected as Horry County School District's sole source provider for DDC controls. After 20 years and over 100 projects in Horry County, CMI is now doing work back at Green Sea and Loris High School.

With the changing control needs and the fluctuating cost of energy, CMI has always strived to have Horry County Schools be on the cutting edge. We have been continuously reducing the cost per building in terms of energy, maintenance and labor, improved data management systems, and minimized the need for staff additions despite district wide growth. Better controlling of the environmental conditions in classrooms, office areas and common areas has also been a priority for CMI.

When the threat of Y2K was looming, CMI and Horry County Schools initiated a retrofit program to eliminate Y2K issues with existing energy Honeywell control systems. We replaced existing control systems which were obsolete and not Y2K compatible. We were faced with a unique situation and as a team, we were able to find a solution and stop a problem before anything even happened. This is the type of teamwork that has made our 20 year partnership so successful.

As Horry County continues to grow, Control Management, Inc. looks forward to another 20 plus years of service in Direct Digital Controls. We will continue to serve the county to the best of our ability, and to use creativity and innovation in tis outstanding school system.

Green Sea High School

1986 - 2006: A 20 year tradition of commitment to excellence in DDC Controls



CMI News

WOW!

New CMI Training Class!

Congrats!

With energy prices hitting an all time high and no relief in sight, CMI is pleased to announce the addition of a new class to the existing training catalog.

Energy Management Class

This class is designed to introduce clients to the other products in their APOGEE system that will help to save money - Insight, TEC's and other features.

The topics to be discussed will be: using the scheduler, setpoints and night setbacks, Global Commander and Peak Demand Limiting.

The class will be offered in all three Control Management, Inc. locations: Columbia, Charleston, and Myrtle Beach, and will be the same cost of the other training classes. We recommend that you have a knowledge of the basic features of Insight and know what a TEC does to attend.

Check out our website for further information and dates: www.controlmanagement.com

Congratulations:

Blake deTreville, Cheryl Player, Margaret Wilson and Chad Keller



Congratulations to **Blake** and **Bebe deTreville** on their recent marriage. The wedding was held February 10, 2006 in Columbia, SC. Blake is in Project Management in the Columbia Office.

Congratulations to **Cheryl** and **Curtis Player** on their recent marriage. The wedding was held April 8, 2006 in Columbia, SC. Cheryl is in Accounts Receivable in the Columbia Office. Her new email address is Cherylp@controlmanagement.com.

Congratulations to **Margaret Wilson** and **John Asay** on their engagement. The wedding is planned for October 13, 2006. Margaret is Marketing and Sales Support at CMI.

Congratulations to **Chad** and **Jennifer Keller** on the birth of their third child. Peyton Rose Keller was born Thursday, March 2 around 6:50 pm . She weighed 8 lbs. and 6 oz Mother, daughter and father are doing wonderfully. Chad works in CMI's Service Department.





SIEMENS Customer Lounge

Visit Siemens "Customer Lounge" website to learn a wealth of information on building automation, energy management, indoor air quality, system integration and other topics geared toward our customers. Read case studies on various facilities around the US relating to building automation solutions. The website also contains informative articles from Siemens "Building Solutions Magazine".

Information is added to the Siemens Customer Lounge website frequently. You can take advantage of the "News Alert" program and be notified monthly, by email, when new content is added.

New content for this month includes:

- ◆ 10 New Year's resolutions for a facilities manager.
- ◆ 8 things to consider when choosing a security systems integrator.
- ◆ The power of one: Using a single-service vendor reduces costs, improves efficiencies.
- ◆ And Much More!

For more information access the Siemens Customer Lounge website at:
www.sbt.siemens.com/customerlounge



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