

CSHE



Engineering News

CALIFORNIA SOCIETY FOR HEALTHCARE ENGINEERING, INC.

MARCH 2011

VOL. 40 NO. 1

CSHE 40th Annual Institute



Mike Rijavec
Chair, CSHE 40th Annual Institute
President, CSHE San Francisco
Chapter

The CSHE Annual Institute Committee is pleased to announce the 40th Annual CSHE Institute that will be held at the Hyatt Regency Embarcadero in San Francisco on April 20th thru the 22nd. The Hyatt Regency is located on the picturesque San Francisco waterfront at the foot of Market St. The location is in close proximity to many interesting attractions, shopping districts and beautiful vistas of the San Francisco Bay.

This year's theme is *Bridging the Gap on Future Energy Demands*. A wide variety of informative and worthwhile presentations will be available to attendees that will make for a great educational value to you and your facility. The institute will feature discussions on energy related subjects, Combined Heat and Power Units, budget strategies, as well as, legislative and regulatory updates. Many timely classes will be available and prove to be a valuable educational experience to facilities operational and management staff as well as vendors. If you need additional information please contact the CSHE state office at 916-552-7639.

The third annual institute golf tournament will take place on April 20th at the esteemed Presidio Golf Course. The Presidio Golf Course has been a San Francisco landmark since 1895. With spectacular views of the Golden Gate Bridge, the Presidio Golf Course continues to be a San Francisco institution delivering a magnificent golf experience. As the second oldest golf course west of the Mississippi, the Presidio Golf Course enjoys a rich history that has provided magnificent experiences to U.S. Presidents, famous military officers, and visitors from around the world.

40th Institute continued on page 3

Mechanics Evaluation and Healthcare Certification (MECH)

Mark Nelson
Chair, Education Committee



At the 2011 CSHE Annual Institute, April 20 – 22, 2011, in San Francisco, the Mechanic Evaluation and Certification for Healthcare (MECH) test will be offered from 1:00 to 3:00 p.m. on Friday, April 22.

Each year in the weeks prior to the annual institute, CSHE hosts the "MECH Review Group" which is a seven week 'refresher' course that reviews each of the seven categories of the exam (Carpentry, Electrical, Plumbing, Central Plant/Boilers, Safety Support Services, General Maintenance, and HVAC Systems) in a conference call forum.

In 2011, the MECH study group conference calls will begin on Wednesday, March 2 at 8 a.m. and continue each week for seven weeks ending on April 13, which is one week prior to the institute. All engineers interested in certification, and have been a healthcare engineer a minimum of two years, may register to participate. Contact the CSHE State Office to order the MECH Preparation Manual or request application to test.

Questions? Contact Joyce Jones, jjones@calhospital.org or (916) 552-7539. Conference fee for the seven calls is \$50. Checks can be made payable to CSHE, 1215 K Street, Suite 800, Sacramento, CA 95814-3946.



*Patrick Silvestri
CSHE State
President*

I am truly honored to have been elected, by my peers, as the CSHE State President for the term 2011-2012. The executive committee officers who will serve during 2011-2012 are:

Mark Nelson, State Vice President. As part of his vice president duties, he will serve as the chairperson for the bylaws committee and the Robert Mack Scholarship review committee.

Chuck Peek, State Secretary.

Rick Barker, State Treasurer and chairperson of the Finance Committee.

Martin Schoonderwoerd, Immediate Past President, and chairperson of the Ethics Committee.

CSHE Update

Our organization continues to grow, and is very healthy financially. Our membership grew by more than eleven percent from December 2009 to December 2010, which is outstanding! If you have not had a chance, please visit the "new and improved" CSHE website (www.cshe.org) which was revised in late 2010. Do not forget the CSHE 40th Annual Institute to be held in San Francisco, April 20 - 22, 2011. The golf tournament has been scheduled on Wednesday followed by two days of informative and up to day

educational programs. For further information, visit the CSHE website at www.cshe.org where you may register on-line. If you have questions, contact the CSHE State Office at (916) 552-7639.

(California) Office of Statewide Health Planning and Development (OSHPD)

OSHPD had a very busy 2010. They had to complete the review and issue building permits for all 1661 projects by December 31, 2010. Additionally, they had to complete the SB 499 reports for the State Legislature. These reports gave a "snapshot" of where all hospitals are in their seismic projects and compliance plans.

CHA Board of Trustees Meeting

The first meeting was held February 2011. Many topics were discussed, but the two most important issues were 'Healthcare Reform' and the State of California budget crisis. There are many views on these two issues, and for specific details visit the California Hospital Association (CHA) website.

CHA Accreditation & Licensing Committee

As the CSHE State President, I am a member of this CHA committee. This committee reviews and reports on a multitude of subjects related to The Joint Commission (TJC); Centers for Medicare and Medicaid Services (CMS); and California Department of Public Health (CDPH). From a healthcare engineering perspective, one very important issue revealed in late December

2010 was the "Hospital/(CAH) Facility Life Safety Code (LSC) Occupancy Classification Update." The letter sent from CMS to the State Survey Agency Directors (dated December 17, 2010) has caused an outcry over the interpretation and potential impact to hospitals. The CHA Accreditation and Licensing Committee scheduled a call with CMS officials and along with other state associations were successful in the revision of the letter. (Please see related article.)

CHA/CSHE Title 22 Workgroups

A Title 22 workgroup has been formed to review and update Article 8, "Physical Plant." This workgroup includes members of the CSHE Executive committee, individuals from major hospital systems, with Tony Moddesette as the chairperson. The first meeting occurred on February 24, and we were able to complete a rough draft of potential changes. Stay tuned and we will keep you updated.

As you can see there is a lot going on and it is only February! As always, you may contact Roger Richter if you have any questions.

Hope to see you in San Francisco!

The CSHE Newsletter is published quarterly. The advertising closing date for the June issue will be May 15, 2011.

For advertising requirements and information, contact CSHE at (916) 552-7639 Fax: (916) 552-7617.

Patrick Silvestri, CSHE State President; Roger Richter, Executive Director; Joyce Jones, CSHE Program Manager; Teri Frost, CSHE Database Administrator; Lezlee Willems, graphic designer.

Codes Corner Weekly Fire Pump Testing

The California State Fire Marshal requires those who perform the weekly or monthly test for the fire pumps to receive a limited license by the state of California. This was a change to Title 19 in 2009 and was effective January 1, 2010. The process is explained on the Fire Marshal's website at http://osfm.fire.ca.gov/codedevelopment/pdf/title19/EXPRESS_TERMS_9_5_08.pdf.

The limited license permit fee is \$80 per individual.

Application for permit can be found at <http://osfm.fire.ca.gov/strucfireengineer/pdf/aes/AESapplicationWFPCert.pdf>.

You will also need the "limited license tool checklist" at <http://osfm.fire.ca.gov/strucfireengineer/pdf/aes/AES11.pdf>.

This form must be signed by your local County Fire Marshal.

The test is administered after all forms are completed and payment made to the Office of the State Fire Marshal (SFM) who will contact each individual and schedule the exam.

It should be noted that at this time there is a labor dispute between the Hyatt Regency and the Hotel & Restaurant Employees Union, Local 2. There may be an informative picket line set up outside the hotel during the time of our event. This action is not a sanctioned strike, but is informative only. The hotel has assured us that our event will go on as planned and the security of our participants will be handled appropriately. If you have any concerns about this subject, please contact Joyce Jones at 916-552-7639 or jjones@calhospital.org.

The spectacular setting, the prestigious golf event, and the instructive educational subjects will make the 40th CSHE Annual Institute an event you will not want to miss. I hope that everyone will have the opportunity to experience and participate in this great event.



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Sharp Healthcare Leads the Way in Energy and Resource Management

Raul J. Franco, CHFM, SASHE
District Manager Facility Solutions
Sodexo HealthCare

In 2007, Sharp Healthcare System of San Diego made a commitment to reduce energy consumption throughout the system. One of the major processes included the development of a system-wide energy subcommittee. This subcommittee included facility engineers who actively participated in the use of Energy Star Portfolio Manager Program to establish database benchmarking. In addition to establishing data benchmarking, numerous site surveys and audits were performed using local utility resources and consulting firms. The results of these surveys produced a number of potential energy projects which are summarized in the following report of the activities and accomplishments in the subsequent years.

Sharp Healthcare Leads the Way in Energy and Resource Management

As the primary healthcare provider in San Diego County, Sharp Healthcare is not only setting the standard for healthcare in the region but also energy and resource management.

Sharp HealthCare is a not-for-profit integrated regional health care delivery system based in San Diego, California. Sharp's facilities include four acute-care hospitals, three specialty hospitals, and numerous medical office and support services buildings.

In January 2009, Sharp's executive management team launched a systemwide Green Initiative to proactively manage the energy and resource performance of the system's facilities infrastructure. According to Vice President, Business Development Donna Serpico-Thompson, the Green Initiative "affirms Sharp's commitment to the environment, and therefore the health of the communities we serve."

Her first step was to gather representatives from each of their hospitals, health plan and medical groups. These "Green Team" members ensured that their efforts and findings would be communicated throughout the rest of the Sharp community. Reporting to the Green Team is the Natural Resource Sub-committee, comprised of the engineering managers from each of their entities, facilities development, and business development.

To aid the Green Team in meeting its en-

ergy goals, Sharp also participated in San Diego Gas & Electric's (SDG&E) Healthcare Energy Efficiency Program (HEEP), a program administered by SDG&E through a contract awarded to Willdan Energy Solutions (aka Intergy Corporation). The HEEP program offers a full range of energy efficiency services to assist customers with identification of and financing for energy conservation measures.

Starting in May, 2009, and through the following month, HEEP assisted Sharp with energy assessment activities at its hospitals and medical clinics. The HEEP program staff conducted energy assessments which included a review of ENERGY STAR® ratings and a Phase I energy audit to identify cost-effective energy conservation measures.

The Phase I energy audit identified a total of 73 energy conservation measures (ECMs) across three hospitals and two ECMs for the medical clinics. From these, 25 ECMs were identified for a Phase II analysis. This more comprehensive analysis generated detailed information on energy cost savings, project installation costs, financial incentives available through SDG&E's HEEP, and simple payback on the potential ECMs. This provided the Natural Resource Sub-Committee with the necessary financial analysis for decisions about capital requests for ECMs.

Results of the Phase II analysis revealed five projects with a simple payback of five years or less. Eight offered longer payback periods but provide promising returns in the long term. The conservation measures not only include retrofit-

ting lighting and other infrastructure updates but also took into consideration energy use by vending machines, computers and servers.

Taking advantage of system level conservation measures also uncovered energy savings in technology. For example, features already found in workstations running Windows and Mac operating systems will also cut the amount of energy used by each PC in half. Configuring workstations to use Computer Power Management Features to place monitors and computers into low-power sleep mode saves energy, money and helps protect the environment. Deploying this feature can result in savings of \$25-\$75 per workstation.

One project in particular stands out. The recommendation to retrofit lighting in its Chula Vista facility stands to reap \$151,000 in savings annually. This represents a seven-month return on investment.

Using ENERGY STAR's benchmarking tool, Portfolio Manager, Sharp monitored the ENERGY STAR ratings of its facilities as changes were implemented. Results showed improved ES ratings, earning Chula Vista an ENERGY STAR® label. In addition, results for Sharp Grossmont and Sharp Memorial Hospitals identified them as eligible for the ASHE and ENERGY STAR *Energy Efficiency Challenge (E2C)* award for facilities that show an increase in energy performance of 10% or more annually. Sharp Grossmont and Sharp Memorial both exceeded this with a 20% improvement in their energy performance.

Facility	Award	Eligibility
Sharp Chula Vista Medical Center	ENERGY STAR Building Label	Awarded to buildings with an energy score of 75 or higher in Portfolio Manager.
Sharp Grossmont Hospital and Sharp Memorial Hospital	ASHE and ENERGY STAR Energy Efficiency Challenge (E2C)	Awarded to buildings demonstrating energy performance improvements of 10 percent or more annually.

ENERGY STAR Ratings Before and After Comparison

The table below shows the change in ENERGY STAR rating of four of Sharp's hospitals during the course of the Sustainability Initiative.

Hospital	August 2009	September 2010
Chula Vista	81	85
Coronado	72	73
Grossmont	61	70
Memorial	50	57

ENERGY STAR's Portfolio Manager provides an energy performance rating on a scale of 1-100 for hospitals and MOB's. A score of 50 is average.

Sharp Healthcare continued on page 5

ASHE Region 9 Representative

Since undertaking its Sustainability Initiative, Sharp has earned recognition for improving the energy performance of two of its hospitals.

According to Serpico-Thompson, every month Sharp tracks the ENERGY STAR ratings of each hospital and Sharp owned buildings are included in the ES database. This “helps us keep on track and monitor utilization every month. All of our hospitals have seen improvement over the last year.”

The bottom line: the resulting recommendations stand to save the hospital system approximately \$1 million by 2012. This is in stark contrast to the \$2 million in additional energy costs Sharp would have incurred had it not chosen to take these steps.

“Due to multiple energy initiatives being implemented at the same time, it is difficult to track each project’s actual impact to energy savings and thus its individual return on investment. Each project implemented was expected to save in kilowatt hours and dollars, thus providing a resulting increase in ES scores. Sharp has realized the improvement in ES scores over the last year. This means that each project is positively affecting Sharp’s long-term impact on the environment and reducing energy costs,” Serpico-Thompson commented.

The Healthcare Energy Efficiency Program (HEEP) is funded by California utility customers and administered by San Diego Gas & Electric Company, Southern California Edison and Pacific Gas & Electric under the auspices of the California Public Utilities Commission, through a contract awarded to Willdan Energy Solutions (aka Intergy Corporation). California customers who choose to participate in this program are not obligated to purchase any additional services offered by the contractor.

For more information on the program please contact Alex Araiza at Willdan Energy Solutions via email at aaaraiza@willdan.com.



*Ken Gomes
MBA, CHFM
ken.gomes@
emanuelmed.org*

At the recent ASHE election, I was elected to represent you as the ASHE Region 9 Director for 2011-2012. I take this opportunity to give a brief history of ASHE; what my job will be and how I can serve you.

The American Society for Healthcare Engineering (ASHE) is the national organization, which is divided into nine regions. Region 9 includes Arizona, California, Nevada and Utah. Formed over 50 years ago, ASHE’s core purpose is: “To advance our members capability to design, build, and maintain a physical environment that supports excellent care, quality service, safe and effective work, and financial success.” ASHE’s “Big Audacious Goal” is to “be the most respected source of expertise and standards related to healthcare facility construction, safety and operations.” With 10,000 active members, ASHE is a formable player in the healthcare arena, and its advocacy efforts have brought about code changes that benefit every healthcare facility. It offers a variety of educational programs that allow almost everyone the opportunity to learn, sometimes without leaving their facility. Lastly, ASHE wants to bring its resources to local chapters; hence, regional directors that serve you.

ASHE Regional Directors are the representatives that are the front line of the organization. We bring what is happening at the local level to the national attention through newsletters, communication with chapter leaders, and most importantly, through visits to local chapters. This interaction helps build two-way communication between local chapter members and ASHE leadership.

As your local ASHE representative and a conduit to the national organization, here is how I can help you. The more communication I have with CSHE leadership and its members will help me ascertain the issues that are important to you. I plan to attend CSHE’s 40th Annual Institute and hope to meet many of you there. However, if you are unable to attend, I encourage you to contact me with your concerns, questions, or if you wish to learn more about ASHE.

ASHE Advocacy Committee needs your input to support their efforts in obtaining samples of codes, regulations, or standards that members feel are creating unnecessary financial burdens to healthcare organizations. If you can provide help, please visit the ASHE homepage at www.ashe.org, and read the article titled “ASHE Advocacy Committee Needs Your Input.”



For more information, the ASHE website www.ashe.org

Hospital Building Safety Board Update



*Carl Scheuerman
Hospital Facilities
Representative*

The Hospital Building Safety Board (HBSF) met February 15 and 16 for its first full board meeting of 2011. The meeting was attended by a wide representation of the owner, architect/engineer and developer communities.

Office of Statewide Health Planning and Development (OSHPD) Director David M. Carlisle, M.D., Ph.D. addressed the board and advised that the state's fiscal cri-

sis continues to impact all state operations. OSPHD Facilities Development Division (FDD) Deputy Director Paul Coleman provided a presentation showing how OSPHD plan review was continuing to keep pace with the workload even under difficult conditions. Deputy Director Coleman advised the board of the progress being made for implementation of the replacement project management software program ("logbook") used to track plan review progress. Beginning soon, OSHPD will no longer use Instructional Bulletins or Change Orders; future modification of plans will be called Amended Construction Documents. The changes can be viewed in CAN 2-107.4 available on the OSPHD web site. A \$250 filing fee for review of amended construction documents will be required in the future.

The remaining emphasis of the agenda focused on developing 2011 goals for the board. The following statement was adopted:

"Board resources will be focused and mobilized in a manner that will enhance healthcare services to the general public by improving the value and production of facility design, inspection, and construction for the healthcare providers while maintaining safety for building occupants, compliance with current code provisions, and an increased awareness of developments in building sustainability. The Board has identified the quality, cost and duration of the healthcare facility development process as the most significant challenges that must be addressed. The Board will work closely with the OSHPD FDD Deputy Director and staff to produce work products that offer recommendations to the OSHPD Director regarding the following priorities:

- Evaluate the reporting process and 2010 results of the SB 499 reports and offer plans for process improvements to be implemented for the next report deadline (November 1, 2011).
- The development of standard details to be used during construction that will contribute to uniformity and reduce processing time.
- Develop strategies for the communication of educational opportunities which include the development of a 2011 Best Practices.

In addition to these objectives, HBSB committees have selected to focus on developing revisions to the OSHPD three requirements for licensed clinics and hospital licensed departments located in non-acute buildings.

The next full HBSB meeting is tentatively scheduled for June 28, 2011.

CMS Clarifies December 17, 2010 Occupancy Classification Memorandum

On December 17, 2010, the Centers for Medicare and Medicaid Services (CMS) issued a memorandum to its State Survey Agency Directors titled, "Hospital and Critical Access Hospital (CAH) Facility Life Safety Code (LSC) Occupancy Classification Update". The memorandum caused confusion because, as written, it did not clearly distinguish between requirements for various occupancies. As originally issued, all clinics providing health services would have been required to comply with all Ambulatory Health Care requirements in NFPA 101, 2000 edition, Chapters 20, 21 and additional referenced chapters. The ambiguous standards could have triggered millions of dollars in renovation costs to clinics and

hospital buildings in California alone.

CHA's Joint Committee on Accreditation and Licensing and several other associations and provider groups, contacted CMS with its concerns. As a result, on February 18, CMS sent out a revised memorandum to State Survey Agency Directors making the requirements much more acceptable to the provider community. The memorandum can be found at www.cshe.org, click on Legislative and Regulatory. If a hospital was cited due to a deficiency based on the original December 17 memorandum, please contact your Regional CMS office.

Contact: Roger Richter at (916) 552-7570, rrichter@calhospital.org

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For immediate consideration, please e-mail your resume to Paula.M.Gallegos@kp.org or submit your resume online at jobs.kp.org, referencing job numbers 061929 or 061930. Please visit <http://jobs.kp.org> for complete qualifications and job submission details. Kaiser Permanente is an AA/EOE employer. Drug-free workplace.

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