

1<sup>ST</sup> PERSON

## INTERVIEW

## Eric Geen

Confessions of a Hotel Chief  
Engineer Working in Paradise

Eric Geen

Chief Engineer –

Key West Marriott Beach Hotel

by Robert Elliott, CCE

I recently had the opportunity to visit Eric Geen, Chief Engineer at the Key West Marriott Beach Hotel. The property is beach front and absolutely beautiful. During my visit, the weather was unseasonably cold for February, all the way down to the 70s. We also met some vacationers from Alaska and they had just left weather that was 30 degrees below zero; a full 100 degree differential.

**HI ERIC, CAN YOU TELL OUR READERS A LITTLE ABOUT YOURSELF AND YOUR PROPERTY?**

My name is Eric Geen and I am the Chief Engineer at the Key West Marriott Beachside Hotel (KWMBH). Our hotel is the first hotel you pass on your way into Key West, on the water with two small beach areas. We are a four star four diamond; full amenity resort with 213 suites and over 6000 square foot of banquet, ballroom, and conference area.

(cont. on pg 10)



*Key West Marriott Beach Hotel  
Key West, Florida*

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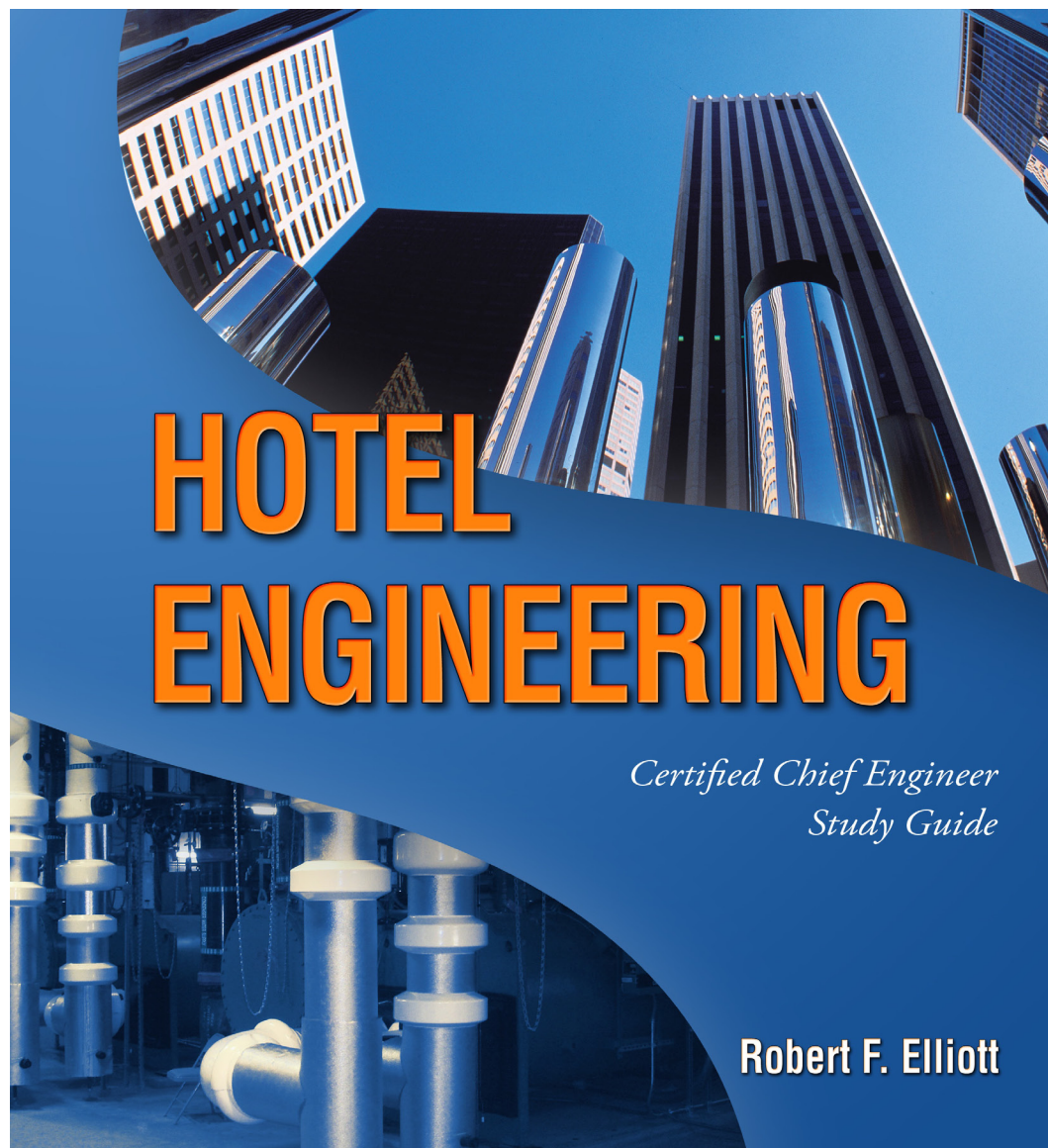
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# Trigeneration for Hotels and Casinos

By Jim Crouse

Executive Vice President Sales & Marketing  
Capstone Turbine Corporation  
[www.capstoneturbine.com](http://www.capstoneturbine.com)



Heating enormous amounts of space and water, keeping thousands of lights radiant, and air conditioning can compose nearly 75 percent of a hotel's overall energy use. These four consuming power

applications are the reason the hospitality industry pays outrageous costs—nearly \$4 billion per year—for energy.

While a baseload electric generator produces electricity, its exhaust heat byproduct is captured and recycled—rather than wasted—to create heating and cooling. It's caught in a heat recovery module and diverted to an absorption chiller to produce cooling, such as air conditioning. Depending on the facility's fluctuating power needs, heating and cooling output can operate concurrently or interchange to deliver variations of hot water, hot air, steam, and space cooling.

Economic, technical, and environmental benefits exist for using a single fuel to generate three primary energy requirements.

When compared to traditional power sources (gensets and boiler heating) microturbines are low cost, more reliable, require less maintenance and associated downtime, have low noise and space footprints, and are highly efficient.

In fact, microturbines can achieve energy efficiencies as high as 90 percent compared to 35 percent from conventional systems that produce power and heat separately. Less fuel is required to produce a given amount of energy because conversion and transmission losses are avoided, which boosts microturbines' ability to produce near-perfect efficient scores.

A microturbine's heat output can be used

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***“This isn't a future engineering dream; it's a reality for smart hotel and lodging engineers.”***

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Imagine the industry's three primary energy needs—electricity, heating, and cooling—integrated into one onsite system that accomplishes it all cleanly, reliably, efficiently, and at a lower cost than traditional energy sources. A system with a longer, healthier equipment life that can improve guest comfort and significantly enhance corporate image.

This isn't a future engineering dream; it's a reality for smart hotel and lodging engineers who have deployed combined, cooling, heating, and power (CCHP or trigeneration) systems to save money, energy, and the environment.

## **CCHP: CHP's Cooler Counterpart**

Already acquainted with combined heat and power (CHP or cogeneration) from Lodging Engineer's Fall issue (click here for full story), you understand cogeneration is the simultaneous production of onsite electricity and thermal power from a single fuel. Now it's time to meet CHP's cooler counterpart, CCHP (or trigeneration), which can achieve higher efficiencies per fuel unit than cogeneration and traditional power plants.

A one-stop-shop for all onsite power needs, CCHP systems generate electrical, heating, and cooling from a single fuel.

First, the electricity, heating, and cooling produced onsite by a CCHP system eliminates the need to purchase electricity and fuel for boilers. Additionally, CCHP systems that use certain onsite energy delivery systems require minimal maintenance and help lower a property's environmental impact through reduced fuel consumption and—depending on the energy source—greenhouse gas emissions.

According to the U.S. Environmental Protection Agency (EPA), hotels and casinos are opportune—yet underutilized—markets for CHP and CCHP. Of the nearly 48,000 hotels in the United States, about 10,000 have the energy characteristics suitable for current CHP technology.

CCHP is destined to help hotels cope with swelling energy costs of onsite recreation operations, entertainment, dining, and even laundry facilities.

## **Microturbine-Powered CCHP**

Microturbines—small, clean-and-green alternative power systems—are ideal for CHP and CCHP applications because they are compact, flexible in connection methods, can array in parallel to serve large loads, provide reliable energy, and emit ultra-low emissions.

Is CHP/CCHP a good fit for your hotel?

Source: [http://www.epa.gov/chp/markets/hotel\\_fs.html](http://www.epa.gov/chp/markets/hotel_fs.html)

- More than 100 rooms?
- Pay more than 7 cents per kilo watt-hour for electricity?
- Already implemented other energy efficiency measures?
- Concerned about rising utility costs?
- Guests complain of insufficient hot water?
- Hotel experienced a utility outage?
- Hotel has a central chilled water system?
- Planning to add new boilers or replace existing boilers?

If you answered “yes” to three or more questions, your hotel is likely a good candidate for CHP or CCHP.

to heat and air condition a facility through absorption cooling. Clean microturbine exhaust is ducted to an absorption chiller that uses the heat energy to produce chilled wa-



ter for air conditioning or process cooling.

Most absorption chillers burn natural gas to create heat that drives the cooling process, which means facility engineers need to purchase natural gas for two energy-related sources. Microturbines eliminate this inefficient step. When using a microturbine with an absorption chiller, the generator's waste heat is recycled to drive the process, instead of natural gas.

Microturbines have the advanced ability to automatically switch between cooling and heating mode, making them ideal for hotels with fluctuating seasonal needs.



*CCHP system at The Ritz-Carlton, San Francisco*

### Five-Star Power

Microturbine CCHP applications are not new to the hospitality industry. Hotels and casinos across the country are reaping award-winning benefits from these highly efficient systems, including a West Coast luxury hotel and a renowned Mid-Atlantic five-star property.

Located in upscale Nob Hill, The Ritz-Carlton, San Francisco's track record as the epitome of elite hospitality is matched by its progressive environmental stewardship.

The trend-setting luxury hotel was the first in the world to install the Capstone MicroTurbine®-based UTC Power Compa-

Two federal bills passed that include provisions supporting CHP/CCHP applications:

1. Energy Improvement and Extension Act of 2008 (EIEA) significantly expanded federal energy tax incentives and introduced the CHP investment tax credit.
2. American Recovery and Reinvestment Act of 2009 (ARRA) expands and revises tax incentives for CHP and provides billions of dollars in funding opportunities for CHP and waste energy recovery

ny PureComfort™ combined cooling, heating, and power (CCHP) system to conserve energy and protect the environment.

At the core of the CCHP system, four Capstone C60 Microturbines generate electricity and heat to provide base-load power and air conditioning that support much of the hotel's captivating 440,000-square-foot grounds.

Using natural gas, the CCHP system provides the exquisite 336-room hotel with 240kW of electricity and 120 refrigeration tons (RT) of cooling year-round at 80 percent efficiency, which is near maximum overall efficiency for this type of system.

According to Director of Engineering at The Ritz-Carlton, San Francisco, purchasing the CCHP system resulted from an ongoing plan to lower the hotel's energy consumption and reduce energy expenses. The hotel's parent organization strongly wanted to deploy the highly efficient CCHP system to offset energy loads.

With a 1MW peak electricity demand and significant chilling requirements that approach 300 RTs, The Ritz-Carlton, San Francisco needed a cleaner, more efficient power system to align with its industry-leading corporate standards for conservation.

The hotel's original inefficient 300 RT electric chiller ran 24/7 year-round, even though the hotel's chilling needs often were well below the chiller's capacity.

Today's newer microturbine-based CCHP configuration meets 70 percent of the hotel's cooling demand and is designed to satisfy base-load chiller demand for the whole year. This allows the facility to shut off the inefficient 300 RT chiller for eight months each year. The big payback is the tremen-

dous amount of heat that comes from the four microturbines.

Exhaust heat from the four microturbines is captured by a Carrier Corporation 120 RT double-effect absorption chiller, which can be manually configured to operate as either a chiller or heater. When in cooling mode, the chiller recycles the microturbines' exhaust heat to achieve a COP of approximately 1.3.

Since the rooftop CCHP system was commissioned in 2005, the hotel has reduced its energy consumption 20 percent and saved an estimated US\$120,000 each year in energy costs. With financial support from California's Self Generation Incentive Program and the U.S. Department of Energy, the hotel's return on investment took less than four years.

According to the Pacific Region CHP Application Center, the Capstone microturbine system at The Ritz-Carlton, San Francisco saves enough electricity annually to power 200 average American homes.

With such tremendous energy savings, greenhouse gas emission reduction is inevitable. The clean-and-green Capstone system emits 40 percent less CO<sub>2</sub> a year than conventional systems – a benefit equal to planting 150 acres of pine and fir forest. In fact, the CCHP system reduces 800 tons of CO<sub>2</sub> each year when compared with traditional onsite energy systems.

Additionally, with NO<sub>x</sub> emissions less than nine parts per million (ppm) at 15 percent exhaust oxygen, the Capstone system emits 90 percent less NO<sub>x</sub> a year than conventional systems, which is equivalent to removing 250 cars from the road.

It's clear: the hospitality industry is rapidly turning to microturbines for reliable, efficient, clean-and-green CCHP power.

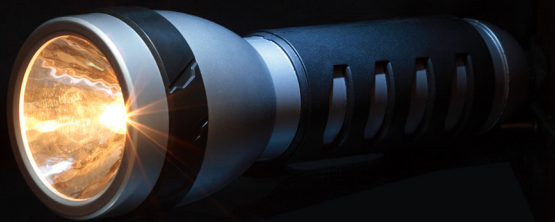
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# Operating In the Dark



## Area-wide power outages pose special challenges for hotel operations

By Thomas G. Daly, MSc. CSP  
Principal

The Hospitality Security Consulting Group, LLC



Within the last fifteen years several U.S. cities including Los Angeles, New York and New Orleans have experienced emergencies involving long duration electrical power outages

impacting hotel operations, among others. Such events posed serious lifesafety challenges for affected hotels' staff and guests alike.

The 1994 Northridge earthquake in Los Angeles, the 2003 Northeast Power Failure impacting New York City in particular and 2005's Hurricane Katrina in New Orleans resulted in 24 hour plus duration power outages in those cities. New Orleans' power failure lasted for weeks.

### Why area-wide power outages are different

The standard response for significant emergencies including localized power failures affecting large hotels is to organize a traditional evacuation followed by a relocation of patrons and non-essential staff to adjacent facilities unaffected by the event.

Where such emergencies involve loss of power area-wide however, hotels become 'areas of refuge' given their ability to house hundreds, if not thousands, of patrons. That conclusion proved true in all of the events in the cities and events cited above. A substantial building with food, water, shelter and limited electrical power provides a safe haven for such occupants in the short term.

Code requirements as to time of operation vary for different emergency systems during power interruptions. The NFPA's Lifesafety Code requires emergency lighting to last only for 1.5 hours. Building code requirements for fire pump operation during power outages typically vary from 4-8 hours duration.

Such code requirements reflect a philosophy of dealing with such outages as short term events where traditional building evacuations are possible. Since the late 70's building codes have required newly constructed high-rise hotels to have emergency power, typically diesel fueled generators, to supply emergency systems. Many older large high-rise hotels have been voluntarily retrofitted with emergency power. Those emergency systems include fire alarm and communication systems, which also have limited battery power; special extinguishing systems; fire pumps; limited emergency lighting (stairways, corridors and public assembly areas); a minimum of one elevator; telephone systems which often have their own dedicated battery bank and the emergency command center. Where spare emergency power capacity exists, hotels have added critical operating systems such as property management systems and key encoding equipment.

Hotel emergency plans for power failures typically include further safeguards to include flashlights, glow sticks and lanterns for staff and guest use

All of the above have their limitations. Diesel powered emergency generators have a limited supply of fuel and portable lighting has a very limited operational life span. Natural gas-fired emergency generators typically have an unlimited duration of fuel available but they are rare in the hotel industry. 'Emergency' generators are also challenged as they are not intended to operate for long durations.

'Continuous duty' rated generators for longer duration operations are available, but again, are rare in the hotel industry in the United States.

### Planning for the worst case

The 'lessons learned' from these historical events is to have an emergency plan that anticipates such contingencies and prepares to re-supply the hotel with needed critical supplies.

Depending on public safety organizations, including local police, fire and the National Guard to assist you is a trust misplaced. The dysfunctional city and state governments in Louisiana during Hurricane Katrina are a telling example. Hotel emergency plans for such catastrophic events should reflect a singular reality. You are on your own.



*New Orleans' power failure lasted for weeks.*

The re-supply of water, food, ice, batteries, fuel and portable lighting equipment needs to be well planned for in advance, initiated immediately and should not depend on traditional local suppliers. Those local resources will be taxed to supply public needs including those of police, fire, National Guard, nursing homes and hospitals. During the 2003 Northeast Power Failure some hotels in New York City were re-supplied from as far away as Washington, DC.

Spare parts including fuel, air and oil filters for emergency generators need to be



stocked on site and the engineering talent of the hotel needs to be trained to handle simple on-going maintenance and minor repairs of same. Emptying the emergency generator's fuel tank, cleaning same and re-fueling it should be done at least every 3 years as a routine maintenance task. Contaminated fuel will clog a generator's fuel filter and stop its operation as a large hotel in New Orleans found out during Hurricane Katrina. Some spare fuel should be stockpiled in quantities allowed by local fire codes, preferably stored outdoors. Hand trucks or other equipment to move 55 gallon drums of fuel should be on site. Remember – a 55 gallon drum of diesel fuel weighs in excess of 400 lbs. Hand operated pumps to transfer such fuel should also be standard equipment in your engineering department.

A regular load-testing schedule for emergency generators, not simply running the generator weekly, should be a required policy. Knowing the generator's fuel consumption calculation vis-à-vis available fuel for a fully loaded emergency generator is key to decision making.

Before running a test of your emergency generator, ask your staff what equipment they 'think' is powered by the generator and then have them catalog what actually was powered when the normal power is pulled and the generator activated. You will be surprised at the outcome as many learned in the run up to Y2K.

Verify that the battery charger for your hotel's phone system is itself connected to the emergency generator. The same advice holds true for each uninterruptible power supply (UPS) that provides back up power for other critical equipment like front office reservation, property management systems, radio system repeaters and key encoding equipment.

### Communications

When disaster strikes, the ability to communicate within a hotel and between a hotel and its corporate headquarters is paramount to ensuring the safety of all occupants and for requesting assistance.

Internally, the hotel's fire alarm and voice communication system is a critical component to provide frequent updates to occupants. Make sure several members of management are familiar with this system's operation and have 'canned' pre-

approved messages for their use to communicate frequently (at least hourly) with all guests.

Many hotels have in this decade changed to cell phones with a talk around capability in place of more traditional two-way radios for staff use. Word of advice – don't. And

other owner communications available including cell phones, landline phones, email or the internet, that unique technology allowed for communication with its corporate headquarters and the planning and successful evacuation in a fleet of 55 chartered buses in the early morning

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***“Satellite phones should be standard equipment in hotels in high risk areas including those historically prone to power system failures, earthquakes, hurricanes and tornados.”***

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if you already have, reverse that decision.

Cell phone systems failed miserably on 9/11 and in the 2003 Northeast Power Failure as few, if any, had back-up power themselves and simply stopped operating when normal power to them failed. Even where such systems have backup power they will fail nonetheless as the result of the overwhelming demand in capacity they were never intended to supply. More than 1,600 cell phone towers were destroyed in Hurricane Katrina and remained so for weeks. Traditional land line phone systems in New Orleans were rendered ineffective as telephony network switching stations were inundated with the resulting floods and connectivity was lost for days.

For internal operations two-way radio systems are much more reliable. You own them, maintain them and have your own FCC Radio Station License and frequencies. A well designed system will have back up power including a UPS for the base station and one or more repeaters. Portable radio units should have spare batteries and spare radios should be available for management staff not normally equipped with same. Power for battery rechargers need to be supplied by the emergency generator. Verify the circuitry.

Two-way radios however typically only provide for communications within the hotel but area-wide systems can be designed by adding directional antennas and high-output repeaters as was done with one major hotel chain post-Katrina in New Orleans. Nonetheless, such systems are rare.

During Hurricane Katrina one hotel in New Orleans was supplied with satellite phones just prior to the event. With no

hours of September 1st for some 1,200 guests and staff, all without death or injury to any involved. All of that extraordinary operation was planned and accomplished by the private sector in less than 24 hours by a small corporate team outside of the area but in communication with the local hotel with its satellite phone.

Satellite phones should be standard equipment in hotels in high risk areas including those historically prone to power system failures, earthquakes, hurricanes and tornados. While satellite phones require a direct line or sight to the sky, antennas can be set up thru selected phone sets within the hotel to avoid the need to go outside. Such systems were installed in several major hotels of one chain in New Orleans as the result of Hurricane Katrina.

### Summary

When considering emergency planning for the worst case think resource redundancy, a dedicated private sector outside-of-the-area source of help and a well trained staff. The CEO or COO needs to put someone in charge with an unlimited budget and tell them their decisions including financial expenditures will not be questioned after the event.

When the time comes, act—don't procrastinate. Lives are at stake.

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Thomas G. Daly MSc. CSP CLSD is a Managing Member of the Hospitality Security Consulting Group, LLC, a current member and past Chairman of AH&LA's Loss Prevention Committee and served as Vice President Loss Prevention for Hilton Hotels Corporation from 1995 to 2007.

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**INTERVIEW WITH Eric Geen**

continued from page 1

**YOUR PROPERTY CAN EASILY ACCOMMODATE THE VACATIONER AS WELL AS THE CORPORATE TRAVELER NEEDING MEETING SPACE. TELL ME ABOUT MEETING THEIR NEEDS.**

Yes, we have different sizes of hotel suites from 300 to 1200 sq. ft. and one to three bedrooms. At 6000 sq. ft. we have the largest conference facility on the island, yes we refer to Key West as an island or living on the rock. Our restaurant Tavern and Town has received numerous awards for fine

swimming pool and 2,000 gallon hot tub that has been with the hotel since 2007.

KWMBH is split into seven three storey

ing to owning my own mechanical contracting company. Since 1993 I have been involved with troubleshooting projects for

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***“Finally, arriving to live permanently in Key West, my fiance stated that I needed to get a job as I was having too much fun in retirement.”***

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buildings, six buildings for guests and the other building for banquets, offices, and yes the usual closet for the engineering and maintenance office and shop. You

various surety companies throughout the US, including the completion of the Loews Hotel on Miami Beach and Foxwoods resort and casino in Connecticut. I set up the engineering facility and preventive mainte-



dining and our executive chef Kevin Montoya has placed first on many occasions in Celebrity Chef Fine Dining competitions, yes we keep his two kitchens running, or rather they insist we keep them running!

All of our suites have individual split A/C systems, with major DX systems for our offices and conference center. Each of these units utilizes a scroll compressor. Thermostats are set for the convenience of guests. Our hotel is fully ADA compliant including a hydraulic handicap lift for our 65,000 gallon

have to love the Architects and Accountants who without fail absolutely know the engineering shop requirements of size and storage capacity required to run a hotel!

**SO HOW DID YOU EVER BECOME THE CHIEF ENGINEER OF A LUXURY HOTEL?**

Starting my career as a marine engineer for eight years gave me the best foundation any engineer could ever ask for. I switched careers and became a mechanical design consulting engineer progress-

nance schedule for the Loews Hotel, and post construction completion, I worked as Director of Engineering at Foxwoods for 18 months. Finally, arriving to live permanently in Key West, my fiance stated that I needed to get a job as I was having too much fun in retirement. So, here I am in Paradise as the chief engineer of a fabulous hotel and a great engineering and maintenance staff of eight. A lot less of a headache than the 386 staff I had at Foxwoods engineering group.





*Sonny Bojtas rebuilding an electronic door lock*

**WHAT ARE SOME OF THE CHALLENGES OF RUNNING AN ENGINEERING DEPARTMENT FOR A HOTEL PROPERTY THAT IS LOCATED, FOR ALL INTENTS AND PURPOSES, ON AN ISLAND?**

The nuts and bolts running the KWMBH is fairly simple but not without challenges; we are on an island. Getting spare parts and replacement or upgraded parts is difficult. Fortunately we have several companies in Miami who really go the extra mile, specifically Grainger. Grainger is basically overnight for virtually everything in their catalogue and to that end KWMBH spends a lot of money with them. HD Supplies in Miami is also a very dependable group.

**DO YOU SUBCONTRACT A LOT OF YOUR WORK OR HANDLE IT IN-HOUSE?**

We sub-contract all our HVAC and refrigeration, major plumbing jobs, major electrical jobs, landscaping, telecommunications

and IT works. It would be remiss of me not to thank our major subs here in Key West that take exceptional care of our requirements and make my job a lot easier at KWMBH. Sub-Zero, Gary's Plumbing, Unlimited Electric, Quality Lawn Care and Protection Plus.

**LIVING HERE IN THE KEYS, PEOPLE MUST ASK YOU IF YOU ARE AFRAID OF HURRICANES?**

Well, yes we are, but we do get notice prior to them arriving. KWMBH was built in 2007 as a Category 5 rated building with windows, doors, exterior walls and roof rated for 200 mph winds. On top of this we have a 1 mega watt diesel generator capable of keeping our complex alive for 7 days utilizing 8,000 gallons of oil from our on-site storage tank.

**SO BEING ON AN ISLAND, FUEL MUST BE SCARCE AND EXPENSIVE. DESCRIBE SOME OF THE EFFICIENCIES YOU USE AT YOUR PROPERTY.**

We strive to be as energy efficient as we can be, however there is always room for improvement. All of our light bulbs, ballasts, batteries, computer monitors, printed circuit boards are all recycled to their specific recycling facilities. Our engineering team is constantly rebuilding various items with parts scavenged from previously used equipment. Jozsef, our engineering supervisor, rebuilds electronic door locks, electronic safe locks, balcony door handles and various other components including housekeeping machinery with parts scavenged from units previously considered beyond repair. This saves our engineering group thousands of

dollars per year. Sonny's specialty, apart from door locks, is hotel furniture. He repairs everything from high-end bar stools to shelving that collapses under extreme weight in our closet engineering office.

**GOT ANY FUNNY STORIES OR HUMOROUS ANECDOTES?**

Our engineering group is a very hard working, fun loving group of guys; even when Alan came to work second shift with his uniform khaki pants wrinkled. When asked if he owned an iron – he said yes – when asked if he knew how to use an iron – he said yes – when asked if he would like the guys to get his pants ironed here in our laundry room – he said yes – I think everyone that saw from the engineering office all the way to the laundry room were laughing so much when they saw a couple of the engineering guys carrying Alan to the laundry; so he would not have to take his pants off going through the Chicago industrial iron machine. Yeah, we are a fun group.

**THIS HAS BEEN A LOT FUN, ANY LAST WORDS?**

Well I guess that's just about most of the info I can share; apart from the fact that I now have to get back to the daily grind of my job here in paradise. Next project; walk the property again to find any deficiencies, check the temperature at the pool and hot tub; Oh, by the way, did I mention it is February 15, 2012, 83 degrees, clear skies, bright and sunny with sunshine glistening off the various shades of ocean blue water at the edge of our hotel.

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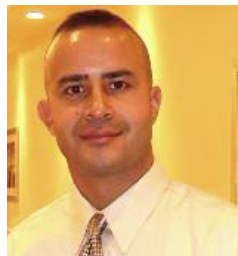
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# ADA Compliance

## For aquatic facilities before May 15, 2012

By Manny Mercado

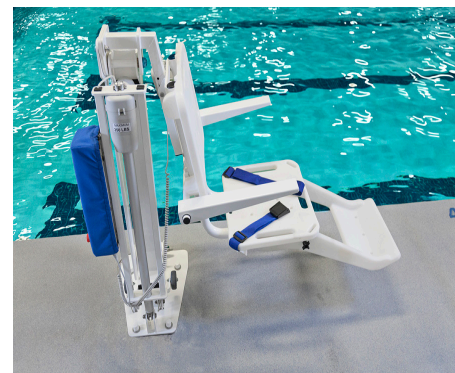


Many if not all entities that have a pool or aquatic facility must be in compliance by such date. The U.S. Department of Justice has revised regulations for the disabilities Act for

Title 2 and Title 3 entities and recently extended the compliance date of March 15 by 60 days. Title 2 public entities are state and local government pool related programs, services and activity swimming programs. Title 3 public accommodation entities are hotels, resorts, swim clubs, and sites of events open to the public. In 2010 there was a minimum standard put in place, so that we had a good understanding of what was in the works. Many of us were in com-

roll right into the pool with the help of a side rail. I have been to this park for the past 10 years and they were way ahead of their time and well informed of accommodating handicapped individuals. So now it comes down to all of us in the hotel industry. No, we can not reconstruct our already existing pools and spas, but we need to be in compliance with the newly revised 2010 requirements. This is a big deal, very big across the US. There are many companies like S.R. Smith in mass production of pool lifts to meet DOJ deadlines.

Many of you have to prepare and have documentation in place at the front desk to show that we are aware of the revised requirements and are working towards making the necessary changes. Please take the time out now and type up a letter, or soon you will have people knocking on



**ADA Compliant Accessibility Pool Lift**

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south like those in Florida, have to jump line and get their orders in now. Contact your corporate office and try to get a letter to allow you such time to make these changes take place.

With our units that we are getting, there will be an added daily task of making sure the battery is charged. Our fixed units that will be anchored into the pool deck will require bonding and grounding. I believe your township annual pool inspector will be well informed of this revised requirement, so it's best to be ready. Also don't forget to add the lift into your pool daily checklist log. If you need further information, please feel free to visit [www.ada.gov](http://www.ada.gov). Stay informed and follow the requirements, if not you will be open and exposed to such lawsuits that can surface.

***There are many companies like S.R. Smith in mass production of pool lifts to meet DOJ deadlines.***

pliance and made necessary changes to accommodate ADA requirements.

I have seen it in places like Hurricane Harbor Water Park by the Great Adventure theme park. They have all water pools at zero entry. Zero entry is a slope design where a person with a wheel chair can just

your door saying you are not compliant. I don't think you want to get a letter from an attorney of such complaint. My property has a pool and a spa outdoor. I have until the opening of the season May 31st 2012 to make sure all is in place. Other properties that are in season year round in the



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# Time Management

By Todd Isbell

Director of Engineering, Hilton Clearwater Beach Resort



Time management when used every day can be a great tool in moving not only yourself, but your department forward in a positive way. I know that sometimes

the thought of time management may be somewhat of a cringing experience in that "I can't implement time management because I am being pulled in so many different directions. It just wouldn't work for me". How many times have you said that? The concept of time management for me was the same until I changed my attitude and decided I was not working in chaos anymore. It's your department and you were hired to take care of the property and it's up to you to do just that. Your GM shouldn't have to hold your hand to get things done. Always try to be a step ahead and to do this you'll need to incorporate time management.

I had read several articles about time management on my journey through life and never thought it would be something I could ever do. I was wrong. One day I told myself there has got to be a better way to do this, and decided to try and make sense out of the chaotic way I was being run around. I never seemed to get anything done that I had planned on doing, and never seemed to be moving forward with my department or my goals. I understood that working like this gets you nowhere because you don't get to see any progress and really it is just going through the motions of going to work and back home. It gives you no vision or goals and is tiring on your mind as well as your spirit.

One day I decided to take along a small notebook, and just write down the things that I saw needed to be accomplished and to make myself a daily agenda to follow every day from beginning to end of every day tasks I had to accomplish such as checking the boiler room, the electrical rooms, etc. I made it as detailed as I could

in that the first thing on the agenda was to walk the property, writing down things I would see that needed to be taken care of as I made my every day rounds, this way I have a firm grip on what I need to delegate in my morning meeting, making sure to allocate a certain amount of time to go along with it. When I got back to the office, I copied everything I needed to do before my team arrived to work, and had their list ready for them when they got there. Meetings before every shift are also a must in that valuable information is passed from one to the other, and communication is the key factor in being the best you can be.

Now all of this didn't happen over night. I had to understand everyone else's projects and departments as well. Every time I left my office to walk the property I had other projects thrust upon me as I made my way past anyone. They had gotten the idea that I was walking around taking orders from them personally, some important, some not so important, one even handing me a 3 pound parts catalog that I guess they thought I was going to carry around with me as I did my rounds. Still they were team members with needs, either large or small and I had to take the time to follow through with a plan to make sure no one was left out. This was all that I saw I needed for myself, and I was actually able to see what was expected of me, and the time allotted every day for me to get these things done. This is where time management and planning come into play. When you leave your office, be sure you have a destination in mind, and hold course.

Keep your mind sharp and do what you set out to do. If there is not a fire or flood; move forward and do what you set out to do. Once complete, check your new list again to adjust the priorities that befell you on your last journey. There is a chance that one of the fifteen things thrust upon you

as you walked your path will be more important than one of the things you already had on your list. Allot your own times for completing projects, taking on emergency calls, unexpected needs, or calls that may take precedence over the original list. Don't forget; always communicate to your co-workers that same time frame you hold yourself to so they too know where you are and what you're doing because they may need to ask questions about a project or get some guidance from you. Remember to stay visible. Keep as many people in the loop as you can without creating more chaos for yourself as sometimes the "need to know" basis plays a vital role in the completion of your project. Sometimes this can be a bit hard to get into your team's heads, but perseverance played a key factor in my vision coming to life. My daily agenda got very long, then shorter, several times until I had honed it down to where I needed it to be.

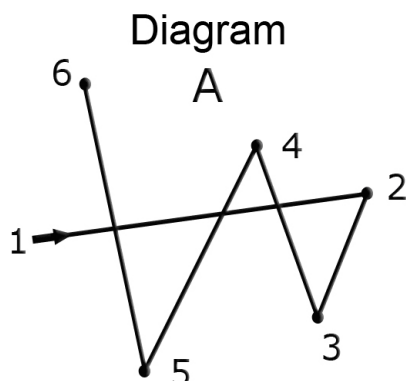



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***"When you leave your office, be sure you have a destination in mind, and hold course."***

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Chaos can ruin a department's ability to function as a single unit and get things done in a timely and professional manner by moving in all directions like a pin ball moving from Point 1 to Point 6 as shown in Diagram A.



Many times people are rewarded for taking the lead in chaotic situations. Not having seen the situation coming, “taking control of the situation and making things right” is perceived as being aware of their surroundings, when they really should have let someone know there was a potential issue. This is a negative impact since now they feel every time something goes wrong or could go wrong; they get rewarded for alerting everyone and get that pat on the back that they so long for, when they could have avoided the situation altogether by noticing and communicating an issue before it became an issue. Nothing gets accomplished this way, it is tiring, and brings moral down. You, as a leader, cannot allow this to happen. So, also in your mindset, you have to stand up and take your place as leader and stop this. Nothing good ever comes from chaos.

Not everyone understands that they are not the only ones that need your help when something is not functioning properly. It's up to you to prioritize, delegate, and lift your team up to the next level, but most importantly, follow up and make sure the projects are completed permanently and not just bandaged. This is another factor in time management. Don't make someone go back and do the project a second time, be sure it is done right the first time. This may take a few more minutes, but you don't have to waste time going back to do it right. This frees up time to move on to other projects thus moving your department in the right

direction. Remember though; this doesn't happen over night. Work on time management as much as you can, but the important factor is to work on it and you'll get there.

Once you have your daily agenda, (and everyone's agenda will be different), set up a meeting with your team and explain to them your vision. Bring them along with you and everyone's workplace will be a place they want to be, not have to be. Listen to their thoughts and ideas as well, you may be surprised at what they have to say. They are in the field and see things that you otherwise may not. Prioritize service calls, delegate and follow up. Take charge and don't let yourself get pulled back into the chaos that so many seem to thrive on.

Write down your list of projects and keep it handy as well. Also in your time management agenda, be sure to leave some time for emergencies that may creep up, and when they (hopefully) don't, you can utilize that time to move on to the next project on your list. Check them off your list as you go because that list shows your progress. Go over the list every morning and evening with your teams so they too can see the progress. This is a motivating action that uplifts their spirits and encourages them to want to do well. Also, don't just tell them what to do, let them add their own

thoughts into the mix, so they can be a part of the project. This gives them the sense of belonging they deserve. Acknowledge jobs well done, and never be negative. If something didn't go right, correct it, learn from it and move on.

When you walk out the door of your office and have several people pulling at you this way and that, you need to understand that you had a reason for going out the door; and continue on that mission, they will learn to call in their issues as standard operating procedure, thus getting on your list faster and then this type of turmoil will go away. Yes, they make think ill of you at first when you don't stop in your tracks and go running after them to see what they need, but first you and they have to understand you cannot be disrupted like this, and when they see that you have control of yourself and your department in that you will not be pulled away from your task at hand, they will understand their issues will get solved much more efficiently when order has been restored from the chaos. You can't move forward if you allow yourself to be pulled back.

Remember, you are trying to create a true sense of harmony and teamwork, and this in turn will create repeat guests that will tell others of the great time they had at our properties. And, they will return to visit us again.

***“Once you have your daily agenda, (and everyone's agenda will be different), set up a meeting with your team and explain to them your vision.”***





# Electrical Maintenance

By August Craanen

**Craanen Technical Services, LLC Westbury, New York**  
**Tel: (516) 782-7280 | Email: [consulting@craanen.com](mailto:consulting@craanen.com)**



Electrical control and distribution systems are generally complex and expensive parts of a Hotel. These systems need to be effectively maintained so they can operate at optimum performance over their serviceable life. It is common to find significant effort applied to maintenance of mechanical systems / equipment, with less focus on electrical systems and equipment.

Electrical systems should be inspected by a experienced (Licensed) electrician every 2 to 3 years; Preventive Maintenance (PM) typically includes check-

ing switchgear, panel boards, and connections, and cleaning and re-torque of electrical-equipment connections. Over-current devices should be cleaned and lubricated as required; fusible switch units should be checked to make sure all fuses within the unit are from the same manufacturer and are of the same class and rating. Note that arcing failures occur where connections have been loosened as a result of thermal cycling.

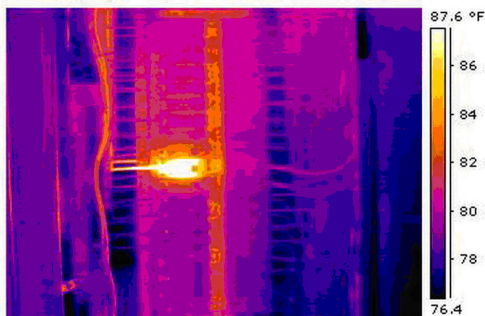
When performing the above mentioned tasks one must follow all recognized safety practices such as those contained in the National Electrical Safety Code, OSHA and other local safety regulations during maintenance. All of the units of the

equipment to be maintained must be de-energized, tested for potential, grounded and tagged out before removing covers and barriers for access to primary circuits.

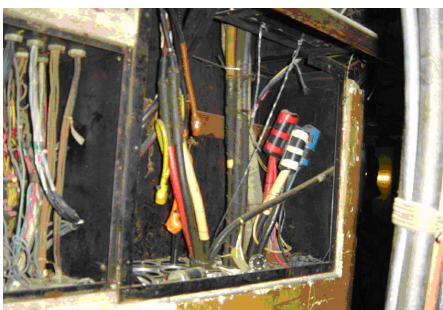
An estimated 25-30% of all large fire losses are caused by electrical faults. Many fires could have been prevented if switch boards, main electrical distribution panels, and transformer connections would regularly be infrared (thermo-graphic) scanned. We recommend performing an infrared scan every 5 years.

During many Hotel condition surveys conducted over the years it became evident that the maintenance / upkeep of the electrical systems leaves in many instances much to be desired.

## Pictures of various maintenance deficiencies:



*Infrared scan of a Hot spot*



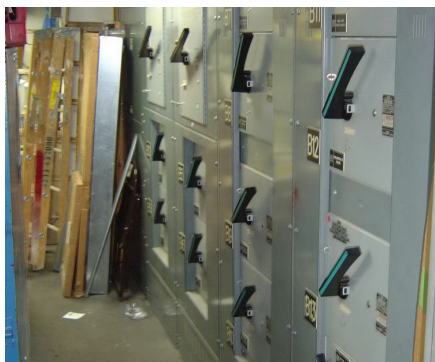
*Open boxes*



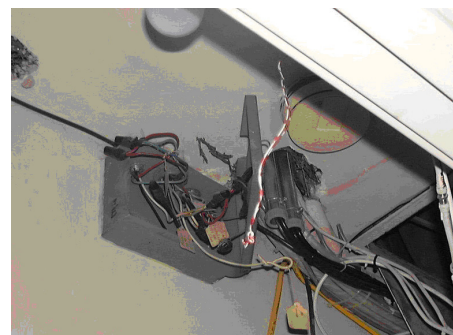
*Why not close the panel?*



*Rust proofing, a great concept*



*Improper storage*



*Is this up to code?*

# Reducing Moisture Infiltration

by

Jim Parsons / President/ CEO  
Water Management Consultants & Testing, Inc.



As we all know, our nation's economy over the past few years has been soft, but the good news is financial indicators are showing strong signs of improvement for

2012. That means more heads in beds and more of those delayed Capital Expenditure (Cap Ex) projects are beginning to be funded. And, we can expect even more activity over the ensuing months. However, one tendency for property owners and managers strapped with little to no available Cap Ex funds is to compensate by delaying needed renovation projects and skimping on maintenance. This approach may solve immediate budget shortfalls but, putting off necessary maintenance and restoration projects could cost plenty more in the long run because of the added time and labor needed to repair damages left untreated. This problem often manifests itself as the result of hidden moisture infiltration.

Simple weather and waterproofing techniques can improve performance and reduce overall maintenance by protecting buildings from surface deterioration, leaks and moisture problems that damage the façade, its longevity, and aesthetics. With a variety of materials available that claim to minimize these defects and failures while protecting and preserving the structure,

smallest amount of water infiltration through cracks or voids in the wall masonry can result in damaged flashings and failed sealant joints that generate widespread leakage. Advanced elastomeric, water-based silicone coatings seal out water while still allowing moisture vapor to escape from inside the substrate, minimizing blistering and de-lamination to provide waterproof protection and long-term durability.

**Climate:** Whether ski chalets or tropical resorts, silicon-based elastomeric coatings cure to a lightweight, flexible membrane that can bridge hairline cracks and handle variations in movement or pressure imposed by expansion-contraction of sealed building joints. A silicone base allows the coating to remain elastic after years of ultraviolet rays, hurricanes, high-speed winds, humidity, ozone, rain, snow, and temperature extremes and it protects against cracking, chalking, and peeling.

**Versatility:** A good exterior paint should be compatible with a variety of different building substrates, including masonry, poured and precast concrete, fluted block,



easily applied with a roller, power roller, brush or spray and don't require special mixing, compared to other multi-component polyurethane sealants. The water-based formulations also make for easy clean-up.

**Sustainability:** For many building owners, the hotel's exterior paint choice is tied up with environmental concerns. Zero or low-VOC (Volatile Organic Compound) paints are available for people with chemical sensitivities. Many organic compounds are on the market that provide a low-odor (solventless) water-based coating that meets most current Federal guideline's limit for Volatile Organic Compounds (VOCs), testing well below 200 grams/liter.

With so many factors that challenge the durability of a building, using the right building materials to fight water infiltration becomes critical to facilitating aesthetic beauty and unparalleled performance for longer lasting structures.

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***“A good exterior paint should be compatible with a variety of different building substrates.”***

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choosing the right one can be daunting.

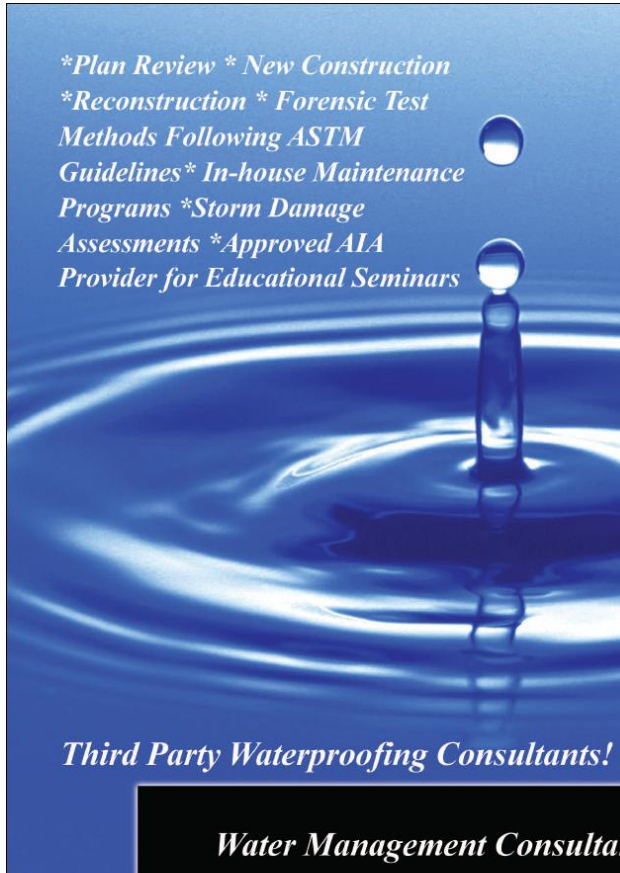
Here are a few factors to consider that will help guide you to a more successful maintenance program:

**Permeability:** Water infiltration is one of the biggest culprits to building damage. The

brick, stucco, exterior insulation finish systems (EIFS) and previously coated masonry surfaces, while protecting and enhancing the structure itself.

**Easy Application:** Simple and easy to use, one-part elastomeric coatings can be





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## UPCOMING INDUSTRY EVENTS

### Central Florida Hotel & Lodging Association

**Apr**, 5th 2012, 8:00am  
CFHLA Office

### Hotel Engineering Association (Houston)

**Apr**, 19th 2012  
April's Meeting will be Sponsored by Scott Martin & Scott Equipment  
**May**, 17th 2012 – To be announced.

### The Hotel Engineers Association (New York)

**May** 24, Thursday, 2012, 8am – 10am  
Noise Code

### Puget Sound Hotel Engineers Association

**Apr** 26th 2012, 5:15 PM  
Sheraton Seattle  
**May** 31st 2012, 5:15 PM  
Siemens Industry  
**Jun** 28th 2012, 5:15 PM  
Hilton Gardens Inn Issaquah

### Greater Philadelphia Hotel Engineers Association

The GPHEA meet every third Wednesday of the **month** to discuss issues (what works, more importantly, what does not work) and best practices. With an educational speaker at each meeting and fellow peers, creating relationships in an ever changing environment can be the key to the success of your building.

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