January 2007 Issue 9

TSIG NEWS

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Adventures from the Field

Episode 1: "Caught Between Foam and a Void Space"

The territory becomes dark and dusty as wires and pipes hinder my path to providing my client a successful, above the ceiling penetration survey. However, I continue to press on. I can still remember the Director of Facilities inform me with confidence that the area was just renovated and that finding horizontal or vertical penetrations would be an impossibility. Suddenly, from behind a duct shaft, I locate my first glimpse of the prey, the illusive insulating foam. With never ending hospital construction, the more we see the use of insulating foam spray being used to seal void spaces around piping, wires, and duct shafts going through barriers. In other cases, the use of fiberglass fabric can be seen used by contractors as the sole means of fire stopping.

BEWARE! Both of the aforementioned methods of fire stopping are not appropriate! However, those of us in the field (including Life Safety Surveyors) are seeing it used at an increasing rate. How can you combat this problem? Facility Directors can either provide education to contractors before construction is complete and/or institute contractual clauses in their purchase agreements; stipulating only appropriate fire stopping material be used. The road to ridding your barriers of this nasty pest can be difficult with most Facility Directors having little to no resources to devote to looking over a contractor's shoulder, but by discussing the issue at the onset with your contractor may prove to be beneficial in the long run.

"Happy Hunting from the Field"

Written By: Mr. Jeffrey Klausner

Surviving JCAHO's New Life Safety Survey Process

Is your Team Ready?

You Pick the Date

February 23, 2007 @ Marriott Hotel Mt. Laurel
915 Route 73
Mt. Laurel, NJ 08454
856-234-7300

March 16, 2007 @ The Somerset Marriott
110 Davidson Avenue
Somerset, NJ 08873
732-560-0500

Registration and Continental Breakfast
8:00 a.m.—9:00 a.m.
Program Time
9:00 a.m.—12:00 p.m.

Register on Line @ http://www.tsigconsulting.com

Generator Testing

Joint Commission issues new requirements for Emergency Generators : EC.7.40.5

New Generator testing requirements were recently published by JCAHO and organizations must establish compliance prior to July 1, 2007.

The 3 new EP's under EC.7.40 out-line the basic requirements of an extended testing program:

EP 5: Generators specified under the standard must be tested "at least once every 36 months for a minimum of four continuous hours" under a load at least 30% of the unit's name-plate rating.

EP 6: If a test fails, the organization must implement "interim measures" to compensate for the increased risk to patients and others.

EP 7: If a test fails, the organization must retest the generator following repairs/ corrections.

EC.7.40.5 requires hospitals to test their generators for 4 continuous hours at ≥ 30% of nameplate rating. To assure compliance with this initial requirement, you can use an existing event that has occurred after July 1, 2004 that meets the criteria stated in EP #5. For example if you successfully operated your Gen set for 4 hours in August 2005, and the run fulfilled the criteria of the new EP's, you are in initial compliance. In that case, you would not be required to do an additional extended run test until the 3 year anniversary of that run. In addition you could use a Peak shaving event as long as you met the criteria, and for that month you could use this test as your 30 minute test.

It should be noted however that the Environmental Protection Agency (EPA)" does not consider peak shaving emergency use"- therefore these events need to be discussed with your power de-sign firms and consultants prior to actions you might commence. For further information you can find a fact sheet on the subject at www.epa.gov , refer to "Final rule with regards to Standards of Performance for Stationary Compression Ignition Engines"

It is commonly recognized that the 30% load requirement is to guard against "wet stacking". Some organizations may be unable to exercise their generators at this load. In these situations, organiza-tions can guard against wet stacking by ensuring that the generator's connected load equals 30%. This may require either bringing in a resistive load bank or reconfiguring the existing load to supple-ment the load during the four hour exercise. Another alternative might be, if the exhaust tempera-ture meets manufacturer-recommended minimums, this would be acceptable as noted in EC.7.40, EP #5, Note 2.

Organizations should remember that the testing requirement only applies to units that provide backup power to certain critical functions, as noted in EC.7.20, EP's 5 – 18, make sure to check your program specific manual for details. For example, you do not need to ensure extended power in settings where patients would be stabilized and discharged within 90 minutes.

Organizations that operate their units with NG or LP, do not need to achieve the 30% of nameplate or any specified exhaust temperature, but they still need to conduct four hour tests, as required, and comply with all the other bullet points of this standard.

EC.7.40.6 requires organizations to implement interim measures to compensate for risks when a generator fails a test (4hr or 30 min.). Some steps you should consider when defining your risk re-duction measures might be:

Generator Testing Continued

- **Communicate —** Notify clinical staff and organizational leadership that backup power is compromised.
- **Ready staff for backup plan —** Place staff on standby to implement power failure contingency plans.
- **Restrict services —** Consider canceling elective surgeries and any other non-essential services that would put patients in danger if power failed.

As required in EC.7.20, hospitals need to provide reliable emergency power at all times, therefore an organization that experiences a generator failure during testing must obtain a backup generator immediately. Some steps you should consider:

- Coordinating obtaining a temporary unit prior to testing
- Conducting risk assessments to assess potential outcomes resulting from failure
- Acquiring redundant EPSS
- Evaluating and confirming your existing tie in connections
- Installing of "emergency" tie in connections
- Preparing for the unexpected

Extended testing presents more practical challenges than the 30 minute test. Some examples are:

- Disruption to hospital operations
- Higher expenditures for fuel and personnel
- Noise related issues
- Local ordinances
- Federal rules

Organizations should consider the following recommendations for preparing for and conducting extended run tests:

- **Plan ahead**. Schedule extended tests well in advance, include administrative and clinical leadership in the planning process.
- **Coordinate with critical services**. Work with the following departments to evaluate the best time to schedule the event, surgery, ICU, CCU, neonatal, telemetry, etc.
- **Create written procedures**. As required by Joint Commission.
- **Staff up for tests**. In- house and contracted service personnel.
- **Emergency part repair/replacement**.
- **Replenishment of fuel supply.**

EC.7.40.7 requires organizations to retest generators after repair, modification or corrective measures have been taken. Some steps you should consider to assure compliance include:

- **Document** all retesting measures & actions
- **Procedures** must be consistent with the initial test
- **Prepare** for the unexpected if the retest fails

It is important to understand that these new requirements under represent the minimum requirement for generator testing. The new test is a way to evaluate and identify problems within your systems, the intention is not to replace existing maintenance, inspection and testing practices. The purpose of an EPSS testing and maintenance program is to improve operational reliability by finding and correcting incipient failures before they occur. This, in no way assures that a compliant EPSS testing and maintenance program will eliminate all risk of failures.

Written by: Thomas Lyons

Questions regarding generator testing:

Q. Who should be involved during extended generator testing?

A. Generator testing will affect all departments within a hospital so it proves wise to coordinate said testing with those locations who have the highest risk. You will also want to alert all department heads in advance. Therefore, each department should monitor and report problems within that area. Reporting deficiencies is paramount to continually improve the reliability of the EPSS program. It is recommended that the Safety Committee be kept informed of any problems related to the testing, and follow-up with any problems by establishing a multi-disciplinary performance improvement team to help define how to minimize adverse outcomes and improve future tests.

Q. If we conduct a 2 hr. annual load bank test (for generators with <30% load) can we just add an additional two hours to this test to meet the new 4 hour test requirement?

A. Unfortunately no, The Joint Commission has stated that the two tests cannot be combined. George Mills recently stated that the annual 2 hour load bank test reflects meeting the 12 times per year testing requirements for those facilities whose equipment failed to meet the required 30% minimum load during the exercise. Mills goes on to say that the new triennial test relates to Standard EP5, which "oversees the environmental envelope" of the emergency generators and must be conducted as a separate 4 hour test.

Q. If we experience an extended power loss prior to the next 36 month test, can we count this activity for this new requirement?

A. Yes it is, provided you have continuous load of at least 30% during said time. However it is imperative to maintain well documented generator operating records any time the generators transfer power. If an unexpected outage occurs and extends beyond a four hour period, it can then become the new starting date for the next 36 month cycle.

Q. What type of common problems can a four hour generator test show?

A. An extended test of the EPSS can provide many hidden problems not found with the monthly generator test program. Some examples are: failure of the fuel oil transfer pump, an unmonitored remote radiator fan, overheating of buss connections in a transfer switch, and reliability level of the UPS battery system.

Q. Can we perform any other electrical tests while we conduct the triennial test?

A. Yes, provided you establish proper planning, scheduling use qualified personnel / contractors; you can also perform thermo-scanning of electrical panels, transfer switches, and control panels of elevators operating under emergency power.

Questions regarding generator testing (Cont'd)

Q. What provisions must be in place if one of the emergency generators fails during the test?

A. The potential for generator failure is possible, and anticipation of providing safety for patients is paramount. Similar drills have been conducted during the Y2K exercises. That program should be reviewed and made part of the current emergency management program. Some nursing concerns must ensure that flashlights are available, life support backup prepared to hand-ventilate, and tap bells available to replace the nurse call system. The catastrophic events of Hurricane Katrina also add a dimension of the real world. Consider losing your water booster pumps, failure of sewer ejector pumps, no communication system. These are utility management issues requiring well planned and practiced drills. Another initiative would be to provide a remote disconnect panel, which would provide quick- connect if emergency power had to be provided by a remote portable generator.

Q & A Provided by Mr. John Cehi

The Joint Commission Launches a New "Brand Identity"

JCAHO has not only recently changed the look of their website but they officially changed their name to the shortened: "The Joint Commission". According to JCAHO, this change in their brand and logo was done in an effort to reflect their "continuing effort to improve the value of accreditation and its utility as a mechanism for improving the quality and safety of patient care". Their new website also contains a new tagline: "Helping Health Care Organizations Help Patients"

In case you're wondering what happened to "Jayco" extranet that you probably recently entered your eBBI on, it too now has a new name to go along with their website facelift- it's now called: "The Joint Commission Connect". You can still gain access to the eSOC (including eBBI & ePFI's) by clicking on the Joint Commission Connect logo to access the extranet website.

Written by Mr. George Rivas

Job Opportunities - Situations Wanted

In order to assist our clients and friends, we will be pleased to publish your ads on our web site. If you have an open position, or you are looking for a new position, we will be pleased to assist you.

Email or fax your Ad, anonymously if you wish, and we will publish it on our web site at www.tsigconsulting.com.

Fax# 212-420-4792
Email: heimanr@tsigcosnulting.com

Surviving JCAHO's New Life Safety Survey Process
TSIG Work Shop

Speaker Profile

George Rivas, CHPS

George is recognized as one of the nation's leading experts in healthcare regulatory compliance, with a career that spans over twenty years in providing quality training and consultation for highly successful survey outcomes. George is the former Chief of the Fire Department for one of the largest VA Hospitals in the Country and has provided NFPA Life Safety Code ® training for hundreds of Hospitals nation-wide. He has also provided NFPA and JCAHO training for facility mangers and safety officer for Military Hospitals all over the world.

Firm Profile

TSIG Consulting, Inc. is one of the largest firms performing JCAHO consulting services, training and education with clients nationwide. Our survey team of professionals are industry leaders in life safety code analysis, engineering, facilities management, and the JCAHO survey process.

TSIG Services include:

- SOC Preparation
- EC Continuous Readiness Program
- Mock Survey's
- eSOC services
- Fire Drills
- Preparation of AutoCAD drawings

Registration Form

Mail or Fax your registration form and payment to:

TSIG Consulting Inc.,

740 Broadway, 10th Floor, NY, NY 10003.

Call: 1-877-GET-TSIG Ana M. Temple Ext. 300

SURVIVING JCAHO'S NEW LIFE SAFETY SURVEY PROCESS
FEE $99.00/Person
Friday—February 23, 2007 or Friday—March 16, 2007

Registration Deadline: Friday February 16, 2007 or March 9, 2007
Register on Line @ http://www.tsigconsulting.com

Company Name

Full Name

Title

Organization

E-Mail Phone

Method of Payment

- ☐ Check payable to TSIG
- ☐ Purchase Order
- ☐ Visa
- ☐ MasterCard
- ☐ American Express

Full Name On Card or Full Company name from PO

Address

Address Line 2

Phone

Credit Card # / PO Number Security Code # Exp. date

Signature

CANCELLATIONS: Cancellations received ten business days prior to the program date will receive a refund minus $25 administrative fee. After that time you may send a substitute.

Please Circle the Date you would like to attend

February 23, 2007 @	March 16, 2007 @
Marriott Hotel Mt. Laurel	The Somerset Marriott
915 Route 73	110 Davidson Avenue
Mt. Laurel, NJ 08454	Somerset, NJ 08873
856-234-7300	732-560-0500

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Surviving JCAHO's New Life Safety Survey Process

As a result of JCAHO's addition of a Life Safety Code surveyor to the unannounced survey process in 2005, more & more hospitals are receiving Recommendations as a result of their struggle to comply with those Environment of Care components focused by these surveyors.

In fact, recent JCAHO reports indicate that significant increases in the number of recommendations are a direct result of this new survey evaluation process, and in part resulting in a record number of Conditional Accreditation scores.

Therefore, now more than ever, hospitals need to be prepared for handling the complexity of various compliance measures necessary to survive the Life Safety Code Surveyor.

TSIG Consulting, Inc. recognizes the need to help inform organizations on how to deal with not only the Life Safety Code aspects of this survey process, but also educate those responsible on how to survive the various other Environment of Care standards that are the focus of these surveyors.

In this half-day seminar, we will provide you historical accounts of the Life Safety Code surveyors approach as well as the knowledge and tools necessary for assuring that your organization is better prepared, confident and capable of assuring a positive outcome at time of survey

Who Should Attend?

Safety Directors
Facility Directors
Facility Engineers
Facility Fire Marshals
Emergency Managers
Patient Safety Officers
Survey Prep Coordinators

Program Agenda
Program Key Components

- Historical overview of the Life Safety Code (LSC) survey process
- Who are the LSC surveyors?
- Defining the LSC Survey Process
- Document Review Session and Preparation

  - **Life Safety Records**
    - ⇒ Fire Drills
    - ⇒ Fire Plans
    - ⇒ Risk Assessments
    - ⇒ Testing Alarm Systems
    - ⇒ Testing Suppression Systems
    - ⇒ Fire Safety During Construction

  - **Utility Records**
    - ⇒ Generator Testing
    - ⇒ Changes for 2007
    - ⇒ Automatic Transfer Switch Testing
    - ⇒ Emergency Lighting Tests
    - ⇒ Medical Gas System Testing

  - **Interim Life Safety Measures (ILSM)**
  - **Preconstruction Risk Assessments**
  - **Common Problems**
  - **Useful Tools and Practices**

- Other Critical EC related Documents
- Maintaining the Statement of Conditions (SOC)
  - **Who performs the SOC**
  - **Keeping it a "living document"**
  - **Acceptable record keeping practices**
  - **Common Problems**
  - **Obtaining Equivalencies**

- Changes in the SOC for 2007
- Designing an effective Building Maintenance Program (BMP)

Medical Gas—Storage of Small Quantities

CMS—Centers for Medicare and Medicaid Services has issued a memorandum on January 12, 2007 clarifying their position on the storage of small quantities of Medical Gas as follows:

Summary

- Up to 300 cubic feet of nonflammable medical gas may be accessible in an open corridor as "operational supply" rather than "in storage", when properly secured.
- An individual container of medical gas placed in a patient room for "as needed" (but regular) individual use is not required to be stored in an enclosure, when properly secured.

The purpose of this memorandum is to answer questions regarding storage requirements for small quantities of medical gas and what is considered when determining if a medical gas container is "in use." These issues are not addressed by the 1999 edition of NFPA 99 Health Care Facilities but information on these issues can be found in the 2005 edition of NFPA 99 Health Care Facilities at 9.4.3.

Q1. Can up to 300 cu ft of nonflammable medical gas (12 E sized cylinders) associated with patient care be located outside of an enclosure at locations open to the corridor in a healthcare facility?

A1. Yes, up to 300 cu ft of nonflammable medical gas can be located outside of an enclosure (per smoke compartment) at locations open to the corridor such as at a nurse's station or in a corridor of a healthcare facility. (See clarification below).

This amount of nonflammable medical gas per smoke compartment is not considered a hazard if the containers are properly secured, such as in a rack to prevent them from tipping over or being damaged. In this case the medical gas is considered an "operational supply" and not storage. If the cylinders are placed in a corridor they should be placed so as not to obstruct the use of the corridor. This amount of medical gas is in addition to those cylinders contained in "crash carts" and in use on wheelchairs or gurneys.

Q2. When medical gases are used by patients on a "PRN" basis does the container have to be stored in an approved gas storage room when not being used?

A2. The term "PRN" means "as needed." An individual cylinder placed in a patient room for immediate use by a patient is not required to be stored in an enclosure and is considered in use. It should be secured to prevent tipping or damage to the cylinder. If the resident does not need the use of oxygen for an extended period of time, such as several days, then the medical gas container should be removed from the room and properly secured in an approved storage room.