

**Tuesday May 22**

**Professional Development Seminars**

9:00 a.m. – 5:00 p.m.

All sessions are concurrent and take place at the Henry B. Gonzalez Convention Center.

**Cable Testing 101 and Cable Diagnostic Testing – A Review of the Major Electrical Cable Testing Methods: An Introduction to Cable Rejuvenation**

Wayne Chatterton and Gus Derezes, UtilX Corporation

\$450 Early/\$550 Late

This short course will help the maintenance or electrical reliability manager to make effective plans for assessing the condition of the critical cables in their plant. The IEEE 400 guide on cable testing will be introduced. Different cable sizes, types, ages, configurations and installations will be discussed along with recommendations for dealing with each. The class will review actual test reports from field generated testing protocols. The ultimate goal will be determining the best engineering protocol to insure the electrical reliability of the cable owner's plant. Upon completion of the course the cable owner will be able to make intelligent decisions as to the frequency of testing on their plant cables and the types of testing that should be completed for the cable system they have in their facility. This course will also introduce the cable owner to cable rejuvenation.

**Fitness for Service**

David Osage, The Equity Engineering Group, Inc.

\$450 Early/\$550 Late

A description of API's de facto International Standard for Fitness-For-Service (FFS), API 579/ASME FFS-1 will be presented. FFS assessments are quantitative engineering evaluations that are performed to demonstrate the structural integrity of an in-service component that may contain a flaw or other damage. The Parts of API 579/ASME FFS-1 covering specific damage mechanisms, their intent, when to use them, and the typical subject matter experts and work processes involved in typical FFS will be fully described. The fundamentals of FFS assessments concentrating on the most typical problems encountered in a refinery or petrochemical plant will be discussed and illustrated using example problems. Technical background and validation of the API 579/ASME FFS-1 FFS assessment procedures will also be covered.

**What a Reliability Engineer Needs to Know**

Heinz Bloch, Reliability Engineer

John Reynolds, Moody/Intertek

Ramesh Gulati, Arnold Engineering Test Facility

\$450 Early/\$550 Late

This course will cover rotating equipment, fixed equipment and some basic reliability principles.

**Rotating Equipment:**

This workshop will explain actual equipment issues and describe experience-based solutions in previously unpublished clarity. The facilitator will discuss how best-of-class companies have achieved optimized overall equipment performance by consistently keeping reliability issues totally focused.

**Fixed Equipment:**

The 101 essential elements required to maintain the reliability and integrity of fixed equipment and how to avoid the primary cause of leaks, failures and ruptures.

**Reliability Engineering:**

Is it a career or a stop in a career path?

- How to be successful as a reliability engineer
- Pitfalls to avoid in career planning
- Developmental aspects of reliability engineering

- Engineering Excellence: what is it and how much can we afford or not afford?
- Wrap up the session to fold in various aspects of the work and jobs and what it takes to be a respected member of the reliability community

### **Planning and Scheduling**

Alan Warmack, T.A. Cook  
\$450 Early/\$550 Late

During this course, participants will gain a thorough understanding of the planner/scheduler's role in their daily functions. In this workshop, we will work together using hands on exercises to give first-hand experience to the participants. We will also understand the personnel they interact with to be successful. Additionally, we will discuss a number of pitfalls related to Planning and Scheduling and how to overcome them through proper leadership.

#### **Deliverables:**

- know the three main types of maintenance work and how they should be managed
- have a clear understanding of Planner/Scheduler roles
- understand the need for good work identification practices
- understand the need for good prioritization of incoming work
- know what a job plan consists of
- know how to build a standardized job plan
- understand how to conduct effective meetings (scheduling)
- understand the roles of supervisors and technicians during execution and closeout
- understand the value of KPIs and backlog management in identifying opportunities for improvement
- understand the importance of building good working relationships with various departments at your site

4:00 p.m. – 5:00 p.m.

### **Ethics and Excellence for Engineers**

Laura Vaccaro, Valero Energy Corporation

The ethics workshop will review engineers' roles and responsibilities in applying professional engineering ethics to their professional conduct. The discussion will begin with a definition of ethics and then discuss situations where ethics are brought to bear. This workshop is intended to provide the training needed to maintain a professional engineer's license in those states that require one hour of training per renewal period. AFPM will provide certificates of attendance to those that attend.