The Cooling Technology Institute will present a panel discussion where industry experts will review and discuss the topical issues surrounding water reuse and conservation. Beyond representing an opportunistic example of current sustainability, water reuse possesses ramifications of technological and economic necessity in certain geographies. The panel will address these key points.

Please attend to learn more about this important topic and have your concerns addressed by the panel.
Owner Operator Session
Tuesday, February 8, 2011
12:00p - 2:00p (lunch included)

Come and join Jon Bickford, Chairperson for the Owner/Operator group with Cooling Technology Institute (CTI) at the CTI Annual Conference in San Antonio Texas. This group is made up of people that are responsible for cooling towers at their facilities. It is a chance to talk to others about issues they have with their cooling towers and gain important information on cooling towers. You will also have the opportunity to meet suppliers and manufactures of cooling towers, which will come in handy when you have problems with your cooling towers.

There are a couple of days of presentations given by experts on tower operation, environmental policies, water treatment and structural information. There are breakout sessions where you can join in on group conversations for re-writing CTI standards and procedures. As a member of CTI you can also become a committee member on these groups and help in re-writing of the new procedures and standards.

This year at the Owner/Operator (O/O) session we are going to discuss issues that people are seeing with their towers. We have already started putting together questions that people want to have helped with. We expect this list to grow as more O/O sign up for the conference. Some of the topics that we will be talking about are as follows:

- Safe access to cooling tower gearboxes.
- Switching from one speed fans to VFD driven fans.
- Options of doing away with gearboxes and shafts by going to direct drive fans.
- Rebuilding cooling towers and switching from a wood to a fiberglass tower.
- Do’s and don’ts on cooling tower rebuilds and the building of new towers.
- Lessons learned from tower project.
- Building or making repairs that is even better than the CTI standards. When money is no object.
- Different types of cooling tower products for fill, eliminators, and nozzles.
- Fire headers and lightning protection.
- Water treatment and sludge issues.

The best thing about this group that is after we all leave the conference we will people that we can call at any time for help and advice as tower problems occur.

I hope to see a large turn out this year. With the change in the power industry for running plants as efficient as possible the cooling towers are becoming a very important part in plant efficiency.
Seminar

Tuesday, February 8, 2011
2:00p – 4:30p
Hildago Ballroom

Prepare your questions now for the “Ask the Expert” Seminar
FRP Fire Retardant Properties and Standards for Cooling Tower Industry

Fire retardancy is a major issue in the cooling tower industry and it is imperative for any cooling tower manufacturer to use fire retardant structural materials to meet the set standards. As Fiber Reinforced Polymer (FRP) structural materials are playing a vital role in cooling tower manufacturing, in this presentation, various standards followed by FRP suppliers regarding Fire retardant properties will be discussed.

Presented by: Bhyrav Mutnuri, Bedford Reinforced Plastics Inc.
Bhyrav is currently working as an Engineer in Bedford Reinforced Plastics, Bedford, PA. He received his Bachelor of Technology in Mechanical Engineering from JNTU, India and Master of Science in Mechanical Engineering from West Virginia University. He is also an active member of LRFD-PIC and ASTM D 20.18.02 sub committees

NFPA 214 Standard on Water-Cooling Towers

Deciphering the fire protection regulations set forth by the NFPA 214 Standard on Water-Cooling Towers can be perplexing. This presentation clarifies the requirements of NFPA 214 and how they relate to specific facilities. At the end of the presentation, attendees will be able to identify the critical elements of a comprehensive fire protection system for cooling towers. They will also have a thorough understanding of the safety and economic significance of employing a quality solution.

Presented by: Larry Edwards, F.E., Moran Special Hazard Systems – Mr. Edwards is a regional Manager at F.E. Moran Special Hazard Systems and is a principal member of NFPA 214. His comprehensive background includes every facet of power generation plant fire protection from overseeing design and installation to quality assurance and business development.

Using his breadth of knowledge, Mr. Edwards has conceived innovative and cost-effective solutions for some of the most challenging applications in the industry. Throughout his 40 years of experience, Mr. Edwards has become an expert on relevant codes and requirements and is one of the most recognized figures in fire protection for the power generation market.

Fire Wall Systems

This paper will review the systematic approach that should be followed when selecting an appropriate fire wall system. The paper will also review the test results from the full scale fire test that will be conducted for the purpose of providing information for this paper. Finally, the paper will elaborate on the special design considerations that are necessary to achieve a fire wall system that meets the design parameters, minimum maintenance requirements, and the extended service life that are being demanded for today’s critical cooling tower systems.

Presented by: David M. (Mike) Bickerstaff, Composite Cooling Solutions, LLP
Mike Bickerstaff has three decades of cooling tower industry experience, including erection of cooling towers and air cooled condensers for HVAC and process and power applications. He held senior construction management roles with Marley Cooling Technologies and Ceramic Cooling Tower Company. Bickerstaff is an accomplished construction management strategist, emphasizing professional and safe working environments. Bickerstaff supervised the construction of numerous wood, FRP, concrete and metal tower projects valued to $40 million. His innovative construction planning system reduces both construction time and costs, while improving safety and health programs.

Mike has been through Professional development courses: OSHA 500/502, Safety Audits and Job Analysis, and PRAXIS. He is a Licensed Asbestos Project supervisor. Mike received his BS from the University of Southern Mississippi. He is serving on the Hazard Protection and Environmental Task Group, (2007-2009) with Cooling Technology Institute. He has authored numerous technical papers for CTI.