Meeting Minutes of the Water Technologies Subcommittee
Of the
ASME Research and Technology Committee on
Water and Steam in Thermal System
At
William Penn Hotel
Pittsburgh, Pennsylvania
October 20 – 21, 2004

Attendees:
Bob Bartholomew, Jim Bellows, Ted Beardwood, Debbie Bloom, Bob Holloway, Tony Banweg, Wayne Bernahl, Irv Cotton, Bob Cunningham, David Daniels, Doug Dewitt-Dick, Richard T. Jacobsen, Mark Janick, Colleen Kulick, Roger Light, Len Olavessen, Mike Rootham, Jean Sabourin

Topics of Discussion during the meetings were as follows;

- ASME Sessions for IWC October 2005 in Florida
- Technology Seminar for Spring Meeting at NIST Laboratories April 2005
- New Projects
- Consensus on Operating Practices for Control and Steam Chemistry in Cogeneration and Combined Cycle Power Plants
- Amine Use in High Pressure Steam Cycles and Boilers
- Sampling and Monitoring of Water and Steam in Thermal Power Systems
- Consensus on Pre-Commissioning of Combined Cycle Power Plants

International Water Conference 2005

Allen Harvey will be co-coordinating the sessions sponsored by ASME and its affiliates for upcoming conference to be held in Orlando, Florida, October 9-13th, 2005. A session on high temperature Ion Exchange for Condensate Polishing will be assembled by Jim Bellows. The session on High Temperature Aqueous Chemistry with practiced application for the industry user will be organized by Allen Harvey. Stress Corrosion Cracking/Corrosion Fatigue occurrence in the phase transition zones of steam turbines maybe another session organized by Jim Bellows and David Daniels.

ASME Spring Meeting at NIST Laboratories

Gaithersburg, Maryland, April 26-28, 2005. This Spring, on Wednesday afternoon, it is expected that our meeting will begin with a technology seminar regarding the principals of corrosion in high purity water and steam. The protective oxide layer stability and breakdown will be explored at the molecular level when undergoing stress corrosion cracking, fatigue cracking and flow assisted corrosion. Further details will be posted on the ASME website and all members and non-members whom wish to attend will be welcome.

Work will continue on the consensus documents for Pre-Commissioning of Combined Cycle Power Plants and Operating Practices for Control of Water and Steam Chemistry in Cogeneration and Combined Cycle Power Plants. Time will be put aside for an update on the "Amine Use in High Pressure Steam Cycles and Boilers" project as well as a final review of the sampling and Monitoring document. A brief discussion from our pre-ops teams associated with new projects

will be provided, as they begin to define the landscape components and a suggested template for said projects.

New Projects

During our Fall meeting a discussion of new project prioritization, preliminary reviews to determine the scope of work and timeliness was afforded since two projects are nearing completion. It was felt the revision of the chemistry section of the ASME Handbook on Water Technology for Thermal Power Systems and solo publication may require an initial investigation time prior to launching individual work segments in our Spring meeting 2006. A pre-ops investigation team formed consisting of Roger Light, David Daniels, Mark Janick, Colleen Kulick, and Robert Bartholomew. The project regarding HRSG Start-Up and Cycling Chemistry was determined to be the highest priority/next in line task by the group to address. Much of the discussion revolved around issues regarding challenges that the industry faces which impact availability and reliability. A pre-ops investigation team was formed consisting of Douglas Dewitt-Dick, Tony Banweg, Mark Janick and David Daniels. Boiler System Moth Balling was further redefined to take down (decommissioning), long term lay-up ($\geq$ 2 years) and start-up (recommissioning). The scope of the work was loosely defined to encompass regular and combined cycle power plants including coal and large gas fired installations. No pre-ops team was formed, and discussions will continue. Management education concerning controls, training and instrumentation was further defined as an extension of our now complete, unballotted "Sampling and Monitoring Document". The intent is to create a document regarding on-line analysis and automation. Discussions continue.

Existing Projects

Team leader, Irv Cotton has completed the final document related to "Sampling and Monitoring" and it has been given to Tony Banweg for preparation and forwarding to the committee membership for balloting. It is anticipated that this document will ready for publication after our Spring meeting in 2005. David Daniels, team leader for the "Consensus on Operating Practices for Control of Water and Steam Chemistry in Cogeneration and Combined Cycle Power Plants" document discussed the changes and additional chemistry specification inclusions made to the draft since our last meeting. Further document improvements were discussed. The dated vision should be ready for our Spring meeting to allow for finalization of the draft prior to balloting.

Mike Rootham, team leader for the "Amine Use in High Pressure Steam Cycles and Boilers" project presented the experimental design and check point milestones of the intended research at the IWC 2004 ASME session. The cost of the research is under review.

Revisions and addition information put forth by the three work groups were incorporated into the "Consensus on Pre-Commissioning of Combined Cycle Power Plants." Discussions regarding the same, resulted in further items for inclusion. An updated draft will be revised electronically and forwarded to committee members in the new year to allow for additional pre-work time prior to our Spring meeting.