

**Cooling Technology Institute
2014 Winter Meeting
Houston, Texas**

CTI Engineering Standards and Maintenance Committee

Closing – General Session, February 5, 2014

Bill Howard, Cooling Tower Depot - Chair
James Blake, American Lightning Protection - Vice Chair
Ken Mortensen, SPX Cooling Technologies - Vice Chair and Secretary
Jim Baker, CCS Cooling Twr, Jon Bickford, Alliant Energy, AdHoc Coordinators

I. Call to Order/Announcements/Introduction of Attendees -

At 3:45 PM, Bill Howard began the meeting. A list of 17 attendees at the Closing meeting is available. Opening had 40 attendees, list available.

II. Lead Task Group Chair Reports

Wood, Metal, and Concrete Materials Task Group [Bill Howard]

- **Wood, Jane Hauser [including Redwood, Douglas Fir, Connections, and Plywood]** met Monday at 4:15PM. Reviewed final changes to STD – 103, 114, 119, and 134. Completed these revision and the voting task group members approved submitting STD's 103, 114, 119 and 134 for AD HOC/Public Comment. Designating as Historical: STD – 104 and 117. NDS effects on all of documents is now included.
- **New Guideline, Cleaning of Cooling Towers, Philip Poll, Don Zelek –** met Wednesday at 2:15PM. Added sections on fill and deck to those on basin cleaning, chemical treatment and disinfection. Added references to BUL-109 Nomenclature and STD-159 Legionella. A complete draft will be ready by Summer Meeting 2014.
- **Corrosion of Concrete, Narendra Gosain, Tom Kline –** met Wednesday at 3:30PM. Draft document was reviewed. Scope was expanded to include new concrete towers and add flow chart for condition assessment.

Mechanical Equipment Task Group [Dave Suptic, Craig Burris]

- **STD-151 – Variable Frequency Drives, Dave Suptic – has been approved by the Board of Directors Summer of 2013.**
- **New Standard – Vibration, Craig Burris –** met Tuesday at 11:45 AM. Reviewed and fine-tuned the Draft. This document is expected to go to AdHoc/Public Review by Summer 2014 meeting.

- **Chapter 11 – Electrical Components, Dave Suptic** – No Meeting. Draft document is close to complete for the Summer 2014 meeting.

FRP and Plastics Task Group [Glenn Barefoot, Jamie Bland]

- **New Guideline – Wood to FRP, John Ahern, Glenn Barefoot, Ken Mortensen** – met Tuesday at 10:30 AM. Document purpose was discussed and additional input sought for several sections. Plan is create a full draft and send out for further work by the group.
- **New Task Group Guideline on Thermoplastic Products, Don Zelek** – met 11AM Tuesday. Outline covering flammability, grades of plastic, flammability, physical properties and support. Draft to be completed by April.
- **FRP Siding STD – 131, John Ahern** – Standard is now up for Review.

Tower Operations Task Group [Jim Baker]

- **STD-203 - Industrial Cooling Tower, Tom Toth** – met Wednesday at 3:30 PM to discuss document and recent comments. Expect to detail and send to AdHoc after Summer Meeting.

Hazard & Environmental Protection Systems Task Group [James Blake]

- **Chapter 8 (ES&M) Environmental Aspects of Cooling System Operation, James Blake** – separated from Chapter 7 (Water). Plan to start with collecting concepts and the last existing document and ask for additional international and Water Treatment input.
- **BUL-109 Nomenclature of Industrial Cooling Towers, James Blake** – Reviewed all definitions and abbreviations. Final check with Water Treatment and P&T. Ready for AdHoc/Public Comment at Summer 2014.

Old Business

- **Information, R Seismic Factor, Bill Howard** – The latest ASCE 7 document now expected to include R_f of 2.0, with some adjustment to continuous columns, height restriction of 50', brace at every frame, diaphragm at 25% weight levels. Working with Jim Harris detailing the multi-year Test Plan that may include testing at the University of Guadalajara, Mexico.
- **Materials Certification** – expect Flame Spread to be the first test certification available. Awaiting a technical director.

New Business

- **OP304 Document Procedure** – Will be trialed with several ES&M documents ready for review. Re-draft is proceeding to the Board of Directors.

- **New Document Reviews Due**
 - **Chapter 9 – Ethan Chestnut**
 - **Speed Reducers - Craig Burris**
 - **Lightning Protection – James Blake**
 - **Construction, Safety, and Health – Philip Poll**

III. Adjournment – at 10:36 AM