Director’s Message
by Cyrus Taft

Welcome to the Spring 2009 edition of What’s Watt. If you are new to the Power Industry Division, What’s Watt will give you an overview of what the Division is all about and what services are available to you. I hope you enjoy what you find and if you have any questions, please feel free to contact our Newsletter Editor, Dale Evely, or myself.

January marks a transition in leadership in the Power Industry Division, called POWID for short. Past-Director Dan Lee did an excellent job leading the Division for the last two years. He maintained the Division’s record of winning ISA’s Best Division Award the past eleven years. He established a new partnership with the TradeFair Group to co-locate our Annual POWID Symposium with the Electric Power Conference. He also established a Power Community in ISA to serve as a technical resource for industry professionals. It takes dedication and perseverance to be a successful Division Director and Dan certainly demonstrated both during his two years. His shoes will be tough to fill. Thanks, Dan.

Our new Director-Elect/Secretary is Don Labbe, whom most of you already know from his active role in Symposia. Don was the ISA Program Co-Chair at last year’s Conference in Scottsdale and is also an ISA Fellow. He has authored many papers on advanced control systems and is a recognized expert in that area. Welcome aboard Don.

The first co-located POWID Symposium will be held on 12-14 May in Chicago and I hope many of you will attend the only conference dedicated to power plant controls and instrumentation (think Automation). General Chair Leo Staples, and Co-Program Chairs Jim Batug and Aaron Hussey are working hard to make this year’s event well worth your attendance. The POWID Symposium is a wonderful venue for staying abreast of the latest industry trends from users and vendors. Special thanks to this year’s sponsors, Siemens, Honeywell, and ABB. For more details about the Symposium, see the information provided in this newsletter. If you are a registered engineer, remember that attending the POWID Symposium is an excellent way to earn Professional Development Hours. Certificates of Attendance are available for each session at the conference.

Every few years, the Power Industry Division surveys its member to gauge their satisfaction with current Division services and identify possible new services. This year, we are doing our survey on the POWID web site and you should soon receive an email with the link to the survey. Please take a few minutes to tell us what you think. One lucky respondent will receive a prize for participation; you may be the one.

The POWID Executive Committee met in February at ISA Headquarters and, while the focus of the meeting was on preparing for the upcoming POWID Symposium, some other topics of interest were discussed. A new POWID technical committee was formed to monitor the emerging activities related to Smart Grid. If you are not sure what Smart Grid is, you are not alone. Smart Grid is getting a lot of coverage now in the popular press which generally means it is being over-hyped. That said, there is a considerable amount of real work being done on the subject and there undoubtedly will be impacts on power generation facilities. The new committee will follow Smart Grid’s development and report periodically to the POWID EXCOM on what it has learned. Leo Staples has agreed to serve as the first chair for the committee.

Finally, a word about volunteers. POWID is an organization that is run by volunteers with support from the ISA staff. As such, we are always looking for new volunteers who are interested in the Division and willing to donate some of their time and talents to make it better. One key to a successful volunteer-run organization is to have enough volunteers to spread the workload sufficiently to keep everyone’s load reasonable. POWID has been fortunate over the years to attract enough good workers (oops, volunteers) to not only keep the organization alive, but actually growing. There is no guarantee that this will continue. It is up to all of us to make sure it happens. You know the rest.

As I start my first year as Director of the Power Industry Division, I am thankful for those who have come before me and excited by the opportunity to lead such a respected organization. With some hard work and a little luck, I am sure we can maintain POWID’s leadership role in power generation automation. I welcome all comments and suggestions for improving the Division. See you in Chicago.

Cyrus W. Taft, P.E.
Director, Power Industry Division
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Upcoming ISA and POWID International Conferences

Joint ISA POWID/EPRI Conferences:
Baltimore, Maryland, May 2010

ISA EXPO 2009
Houston, Texas
6–8 October 2009

ISA EXPO 2010
Houston, Texas
October 2010

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Thank You To Our Sponsors
ISA Fellow Award Nominations

ISA Fellow is the highest grade of membership. Isn’t there an ISA Member you know who is worthy of this honor? This prestigious designation shows that a Member has made exceptional engineering or scientific contributions to the effectiveness of automation professionals worldwide and has been recognized by an unbiased, dedicated group representing the industry. Candidates for Fellow membership grade are processed through the Society’s Admissions Committee, and will be elected by ISAs Executive Board at its Spring Meeting in June 2009. To be eligible, a candidate must have been an ISA Member for at least five years and must be a Senior Member.

Deadline for submissions is 30 April 2009.
Submit your nominations today! One of the highest honors that professionals can receive is true, unbiased recognition of their achievements from their peers.

ISA Fellow Candidate Nomination Materials: www.isa.org/fellownom
ISA Fellow Grade Nomination Guidelines: www.isa.org/fellowguide

Let’s recognize outstanding achievement. Complete your nomination for an ISA Fellow Member today. For further information, please contact Laura Crumpler at lcrumpler@isa.org or call (919) 990-9232.

-- ISA Fellow

2009 POWID Conference is Almost Here

The theme for this year’s ISA POWID/EPRI Controls & Instrumentation Conference is: Greening the Power Industry: Using Technology to Address Environmental Impacts & Business Opportunities. Work continues on this conference, which will co-locate with the 2009 Electric Power Conference. The conference will take place from 12–14 May in Chicago, Illinois, at the Donald E. Stephens Convention Center. Some POWID-specific events are also being held on 10 and 11 May. The 2009 event is the 19th Annual ISA POWID/EPRI Controls and Instrumentation Conference as well as the 52nd Annual ISA Power Industry Division Symposium (i.e. POWID Conference).

If you have not already registered for this event—time is running out!

The conference advance program is included in this newsletter. To learn more about the conference, visit www.isa.org/powersymp. To learn more about the ISA Power Industry Division, visit: http://www.isa.org/divisions/powid.

Greening the Power Industry: Using Technology to Address Environmental Impacts & Business Opportunities

12–14 May 2009, Rosemont, Illinois

Welcome to the 52nd Annual ISA POWID Symposium, 19th Annual Joint POWID/EPRI Controls & Instrumentation Conference

The 2009 Conference will be held 12–14 May at the Donald E. Stephens Convention Center in Rosemont, IL (near the Chicago O’Hare International airport) in conjunction with the ELECTRIC POWER Conference and Exhibition. This event provides power generation industry leaders the latest innovations in instrumentation, automation, security and business systems technologies.

Each year this international conference brings together industry professionals in the Power Generation field with a primary focus on Instrumentation and Controls; the largest single event of its type. We anticipate over 60 technical papers/presentations during joint sessions with fossil and nuclear focus, presented over a 2 ½ day period. Additional scheduled items include keynote addresses from industry leaders presented by ELECTRIC POWER; ISA and industry experts’ training sessions; utility CEO roundtable; ISA Power Plant Standards working group meetings; large scale vendor exhibits hosted by ELECTRIC POWER with lunch provided; topped off with the POWID Honors and Awards Banquet.

The co-location with ELECTRIC POWER provides an opportunity for thousands of attendees to hear our message. The Hyatt Regency O’Hare is serving as the host hotel for ISA POWID attendees, so get your hotel reservations in soon! The close proximity to the airport provides for easy access to flights with downtown Chicago in easy reach.

An enjoyable spouse’s program will keep your guest/spouse busy during conference hours. Details coming soon to the Conference website, www.isa.org/powersymp.

A short 10-minute ride north from Chicago O’Hare International airport will get you to the host hotel. The Hyatt Regency O’Hare Hotel is a short walk to the Convention Center.

Please mark your calendar and join us in Chicago.

Conference Contacts:
• General Chairman—Leo Staples, staplehl@oge.com
• Program Co-Chairman—Jim Batug, jpbatug@pplweb.com
• Program Co-Chairman—Aaron Hussey, AHussey@EPRI.com
• ISA Administrator, Technical Divisions/Symposia—Rodney Jones, (919) 990-9418, rjones@isa.org
## Advance Program (as of 27 March 2009)

### Sunday, 10 May

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m. – 12:00 p.m.</td>
<td>POWID Sub-Committee Meeting</td>
<td>Convention Center, Room 51</td>
</tr>
<tr>
<td>1:00 p.m. – 5:00 p.m.</td>
<td>POWID Executive Committee Meeting</td>
<td>Convention Center, Room 51</td>
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<tr>
<td>5:00 p.m. – 7:00 p.m.</td>
<td>Registration</td>
<td>Convention Center</td>
</tr>
<tr>
<td>12:00 p.m. – 4:00 p.m.</td>
<td>Vendor Setup</td>
<td>Convention Center</td>
</tr>
<tr>
<td>6:00 p.m. – 7:00 p.m.</td>
<td>POWID Welcome Reception</td>
<td>Room 40–43</td>
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### Monday, 11 May

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 a.m. – 5:00 p.m.</td>
<td>Registration</td>
<td>Convention Center</td>
</tr>
<tr>
<td>8:00 a.m. – 4:00 p.m.</td>
<td>Vendor Setup</td>
<td>Convention Center</td>
</tr>
<tr>
<td>4:00 p.m. – 6:00 p.m.</td>
<td>Vendor Exhibits</td>
<td>Convention Center</td>
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<tr>
<td>8:00 a.m. – 5:00 p.m.</td>
<td>ISA 67.04 Standards &amp; Committee Meetings</td>
<td>Convention Center, Room 50</td>
</tr>
<tr>
<td>8:00 a.m. – 5:00 p.m.</td>
<td>ISA 77 Standards &amp; Committee Meetings</td>
<td>Convention Center – Room 25</td>
</tr>
<tr>
<td>8:00 a.m. – 4:00 p.m.</td>
<td>ISA Training Classes</td>
<td>Convention Center, Room 52*</td>
</tr>
<tr>
<td>7:00 p.m. – 10:00 p.m.</td>
<td>EP Power Plant Awards Banquet including POWID Facility-of-the-Year Award Presentation**</td>
<td>Convention Center – Rooms 44–49</td>
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** = Dinner fee is an extra cost in addition to POWID or EP w/POWID upgrade registration.

### Tuesday, 12 May

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>6:30 a.m. – 7:30 a.m.</td>
<td>Speaker’s Breakfast</td>
<td>Convention Center – Room 57</td>
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<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>Registration</td>
<td>Convention Center</td>
</tr>
<tr>
<td>7:30 a.m. – 9:00 a.m.</td>
<td>Spouse's Lounge</td>
<td>Hyatt TBD</td>
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<tr>
<td>8:30 a.m. – 8:45 a.m.</td>
<td>EP Welcome, Sponsor Recognition—Session Joint with EP</td>
<td>Convention Center, Room 44–49</td>
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<tr>
<td>7:00 p.m. – 10:00 p.m.</td>
<td>ISA Welcome Address by Jerry Cockrell, ISA President</td>
<td>Convention Center, Room 44–49</td>
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<tr>
<td>7:00 p.m. – 10:00 p.m.</td>
<td>State of the Industry – Jason Makansi</td>
<td>Convention Center, Room 44–49</td>
</tr>
<tr>
<td>9:30 a.m. – 11:30 a.m.</td>
<td>EP's Executive Roundtable</td>
<td>Convention Center, Room 44–49</td>
</tr>
<tr>
<td>10:15 a.m. – 12:15 p.m.</td>
<td>ISA 67 Standards &amp; Committee Meetings</td>
<td>Convention Center, Room 25</td>
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<tr>
<td>11:00 a.m. – 6:00 p.m.</td>
<td>Vendor Exhibits—Co-located with EP Exhibits</td>
<td>Convention Center</td>
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<tr>
<td>11:30 a.m. – 12:30 p.m.</td>
<td>Lunch</td>
<td>Convention Center</td>
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<tr>
<td>12:30 p.m. – 1:00 p.m.</td>
<td>GI POWID Introductions</td>
<td>Convention Center, Room 24</td>
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*** = Included in a POWID or EP w/POWID upgrade registration fee.
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1:00 p.m. – 5:00 p.m.</td>
<td><strong>G1</strong> (Convention Center—Room 24)</td>
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<td></td>
<td><strong>Operations &amp; Maintenance Optimization (3 PDHs)</strong></td>
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<td></td>
<td><strong>Session Developer:</strong> C. Shelley, ExperTune</td>
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<td></td>
<td><strong>POW09-P004</strong> Managing Maintenance and Operations with Real-Time Metrics</td>
</tr>
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<td></td>
<td>G. Buckbee, ExperTune</td>
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<td></td>
<td><strong>POW09-P005</strong> Combined-Cycle Production Increase Using Performance Supervision</td>
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<td></td>
<td>J. Gerry, ExperTune</td>
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<td></td>
<td><strong>POW09-P034</strong> The High Performance HMI</td>
</tr>
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<td></td>
<td>W. Hollifield, PAS</td>
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<td><strong>POW09-P047</strong> Lifecycle approach to Alarm Management—</td>
</tr>
<tr>
<td></td>
<td>How can the ISA18 help to resolve alarm issues</td>
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<td></td>
<td>S. Apple, TIPS</td>
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<td></td>
<td><strong>POW09-P077</strong> Alarm Management for Power</td>
</tr>
<tr>
<td></td>
<td>C. Engel, CapuTech and R. Johnson, Kurz Technical Services</td>
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<tr>
<td>5:15 p.m. – 6:00 p.m.</td>
<td><strong>Welcome Reception</strong> (Convention Center Exhibit Floor)**</td>
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<tr>
<td>6:00 p.m. – 8:00 p.m.</td>
<td><strong>POWID Dinner and presentation of POWID Honors &amp; Awards recognitions</strong>* (Convention Center—Room 46–49)</td>
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**= Included in a POWID or EP w/POWID upgrade registration fee. Guests are an additional fee. 
† = PowerPoint only presentation.

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<tr>
<td>6:00 a.m. – 5:00 p.m.</td>
<td><strong>Registration</strong> (Convention Center)</td>
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<tr>
<td>7:30 a.m. – 9:00 a.m.</td>
<td><strong>Spouse’s Lounge</strong> (Hyatt—TBD)</td>
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<td>8:00 a.m. – 5:00 p.m.</td>
<td><strong>Automation Federation Board Meeting</strong> (Convention Center—Room 50)**</td>
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<td>8:00 a.m. – 10:00 a.m.</td>
<td><strong>G2A1</strong> (Convention Center—Room 24)</td>
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<td><strong>Control Systems Advances—New and Retrofits—I (2 PDHs)</strong></td>
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<td></td>
<td><strong>Session Developer:</strong> J. Williams, Emerson Process Management</td>
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<td></td>
<td><strong>POW09-P022</strong> Primary Air Control Requirements and Dynamics for Pulverized Coal Firing</td>
</tr>
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<td>A. Zadiraka, Babcock &amp; Wilcox</td>
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<td><strong>POW09-P026</strong> Multi-Unit Scrubbers and Digital Bus Technology</td>
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<td>T. Toms, Progress Energy; Robert Gilbert, Worley Parson, and Jamie Foose, Emerson Process Management</td>
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<td><strong>POW09-P031</strong> Implementation of a System of Advanced Control of Furnace</td>
</tr>
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<td>W. Flores, Electrical Industrial Southern</td>
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<td><strong>POW09-P037</strong> Advanced Control Systems Upgrade with a New Engineering Tool</td>
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<td>T. Douglas, Alstom Power</td>
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<tr>
<td>8:00 a.m. – 5:00 p.m.</td>
<td><strong>G2A2</strong> (Convention Center—Room 25)</td>
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<td><strong>Plant Performance—I (3 PDHs)</strong></td>
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<tr>
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<td><strong>Session Developer:</strong> B. Carney, Alstom Power</td>
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<tr>
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<td><strong>POW09-P015</strong> Centralized Alarm Management for Power Generation</td>
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<td>B. Parker, Black &amp; Veatch and S. Smiley, Yokogawa</td>
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<td><strong>POW09-P016</strong> Power Plant Condition Monitoring System</td>
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<td>J. Hartman and D. Richard, InSyst</td>
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<td><strong>POW09-P018</strong> Condensate throttling strategy for minimized boiler stress and increased operating load</td>
</tr>
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<td>L. Deprugney, A. Girard, and M. Midou, EDF</td>
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</tbody>
</table>
### Wednesday, 13 May (continued)

**10:00 a.m. – 10:15 a.m.**

**Morning Break ***

**10:15 a.m. – 12:00 p.m.**

**G2B1** (Convention Center—Room 24)

**Control Systems Advances—New and Retrofits—II (2 PDHs)**

**Session Developer:** S. Maley, US DOE NETL

POW09-P019  
*Life Cycle Management of Automation Systems*  
D. Clout and U. Messmer, Siemens Energy

POW09-P023  
*Improve Your Plant’s In-Market-availability and Realize Increased Revenue with Innovative I&C Technology*  
S. Leibbrand, Siemens Energy; M. Hubbard and D. Motl, New Harquahala Generating Company

POW09-P038  
*Wireless Monitoring of Power Plants: State Estimation by a Moving Horizon-Based Optimization Approach*  
Z. Lu and W. Lin, Case Western Reserve University

POW09-P042†  
*Unit Response Improvements*  
J. Williams, Emerson Process Management

**G2A2** (Cont’d) (Convention Center—Room 25)

**Plant Performance—I (Cont’d)**

POW09-P067  
*Instrumentation, Methods & Analysis Tools for Comprehensive Condenser Testing, Monitoring & Troubleshooting*  
T. Harpster, Ph.D. and J. Harpster, Ph.D., Intek

POW09-P072  
*ZONAL™ Combustion Tuning Systems For Improving T-Fired Boiler Performance*  
N. Widmer, Draxton, G. Xu, and D. Moyeda, GE Energy

POW09-P0037  
*Using a Comprehensive Approach for Monitoring Generator Health*  
T. Laird and H. Anderson, Alstom

**12:00 p.m. – 1:00 p.m.**

**Lunch** (Convention Center) ***

**11:00 a.m. – 6:00 p.m.**

**Vendor Exhibits—Co-located with EP Exhibits** (Convention Center) ***

*** = Included in a POWID or EP w/POWID upgrade registration fee.  
† = PowerPoint only presentation.

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**Wednesday, 13 May (continued)**

**1:00 p.m. – 3:15 p.m.**

**G3A1** (Convention Center—Room 24)

**On-line Optimization Controls—I (2 PDHs)**

**Session Developer:** X. Lou, Alstom Power

POW09-P012  
*Application of Controller Performance Assessment Methods in a Cogeneration Power Plant*  
R. Howard and D. Cooper, UConn

POW09-P017  
*Modeling Non-Steady State Data for PID Controller Tuning in a Cogen Plant*  
D. Cooper, UConn and B. Beauregard, Control Station

POW09-P020  
*Optimal Control of a Drum-Boiler Turbine System Using PSO Predictive Control*  
S. Yang, University of Texas at San Antonio and M. Frye, University of the Incarnate Word

POW09-P029  
*Integrated Non-model-based Adaptive Optimal Control of SCR and APH Systems at Cayuga Unit 1*  
E. Schuster, Lehigh Univ. and C. Romero and Z. Yao, Lehigh Univ. Energy Research Center

POW09-P032  
*Real-Time Optimal Control of A Boiler-Turbine System Using Pseudospectral Methods*  
Chunjian Qian and Shizhong Yang, University of Texas at San Antonio

**G3B1** (Convention Center—Room 25)

**Plant Performance—II (2 PDHs)**

**Session Developer:** B. Carney, Alstom Power

POW09-P070  
*Information Technology in the Power Industry—A 430 MW Gas Fired Plant Experience*  
S. Nino, Invensys Systems Canada

POW09-P078†  
*Fleet-wide Monitoring Solutions*  
C. Engel, CapuTech

POW09-P0037  
*TIS: Trip-cause Information System*  
M. Yang, Korea Western Power

**3:15 p.m. – 3:30 p.m.**

**Afternoon Break ***

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G3A2 (Convention Center—Room 24)

On-line Optimization Controls – II (3 PDHs)
Session Developer: X. Lou, Alstom Power

POW09-P040 A Hierarchy Eld Based On Flow-Balanced Zones Of Parallel Coursing Power Units With A Header
L. Pan and J. Shen, The Southeast University, Jiangsu Province, China

POW09-P041† Optimization of Emissions Reduction Equipment (SCR)
J. Williams, Emerson Process Management, and G. Sunderland, Consultation Energy

POW09-P052 Advanced Steam Temperature Control Using Controller-Resident MPC Algorithm
J. Sorge, Southern Company Services; C. Taft, Taft Engr.; and A. Hussey, EPRI

POW09-P054 NOx, SOx & CO2 Mitigation of Blended Coals Through Optimization
D. Labbe, Invensys Process Systems

POW09-P058 Simultaneous tuning of PID gains in multi-loop PID-based control systems using Iterative Feedback Tuning methodology
S. Zhang, J. Bentsman, B. Petrus, and V. Natarajan, UIUC; C. Taft, Taft Engr.; Aaron Hussey, EPRI; and M. Fauroti, Alabama Power

POW09-P063 Application Of Neurofuzzy Speed And Load Control For Gas Turbine Power Units
S. Delara Jayme and L. Casteelo-Cuevas, IIE; J. Piñón Reyes and J. López Ciseña, CFE

G3B2 (Convention Center—Room 25)

Regulatory, Safety, and Training (3 PDHs)
Session Developer: T. Stevenson, Constellation Energy

POW09-P003 Low-Level Opacity Monitoring
D. Stuart, Ametek Process Instruments

POW09-P039 Steam Turbine Water Ingress Prevention: A Controls Perspective
G. Huber, Jr., Sargent & Lundy

POW09-P065 Instrumented Protective Systems: Testing Procedures Strategies and Requirements
R. Czerwak, Pacific Technical Resources

POW09-P066 Driving Operational Excellence
J. Ukelson, Israeli Electric Corporation

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† = PowerPoint only presentation.

Thursday, 14 May

6:30 a.m. – 7:30 a.m. Speaker’s Breakfast (Convention Center – Room 57)

7:00 a.m. – 12:00 p.m. Registration - (Convention Center)

7:30 a.m. – 9:00 a.m. Spouse’s Lounge (Hyatt - TBD)

8:00 a.m. – 11:30 a.m. G4A (Convention Center – Room 24)

I&C Applications (4 PDHs)
Session Developer: T. Stevenson, Constellation Energy

POW09-P010 Nuclear Densitometer Validation and Calibration Method
J. Key, Southern Company

POW09-P014 Automated System To Apply Mechanical Tests To High-Voltage Alternating-Current Circuit Breakers And Reclosers
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POW09-P030† Once-Through Boiler Control Fundamentals
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POW09-P035 Water Optimization Using Pump VFD Speed Control
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POW09-P053 Low-Cost Wireless Sensor Testing in a Fossil Power Plant
C. Taft, Taft Engr.; J. Sorge, Southern Co., T. Kuruganti, ORNL; A. Nasipuri, UNCC; and A. Hussey, EPRI

POW09-P059 Applying concept of Porous Media in Cv Calculation of a Control Valve using CFD Simulation
J. K. Singh and C. Peterson, Control Component

POW09-P060 Study Effect of Inlet Radius of Curvature on Flow through Orifice using CFD Simulation and Lab Test
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Session Developer: R. Leimbach, Metso Automation

Paper & Panel Session
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R. Leimbach, Metso Automation

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POW09-P049 Unique Challenges Associated with Controlling Biomass Fired Boilers
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J. Leppakoski and T. Joronon, Metso Automation
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*** = Included in a POWID or EP w/POWID upgrade registration fee.  † = PowerPoint only presentation.
Training Courses at the 52nd Annual ISA POWID Symposium

The following training courses are being offered as a part of the 2009 symposium in Chicago, Illinois. The last date to register on-line for these courses is 27 April 2009.

Boiler Burner Management System: Meeting NFPA Standards (ISA code ES16C)
Date: Thursday, 14 May 2009
Instructor: Gerald Gilman, PE
Duration: 1 day
ISA Member cost: $495.00  Non-ISA Member cost: $595.00

This seminar provides an understanding of the boiler burner standards and why they are so critical to this industry. With the emphasis in industry on process safety, the design of Burner Management Systems has become more important than ever. Boiler explosions have resulted in loss of major facilities as well as loss of life.

Registration link: Boiler Burner Management System: Meeting NFPA Standards (ES16C)—IL

Overview of Industrial Wireless Technology (ISA code IC85C)
Date: Thursday, 14 May 2009
Instructor: Peter Fuhr
Duration: 1 day
ISA Member cost: $495.00  Non-ISA Member cost: $595.00

Wireless systems and wireless technologies have advanced to the point where stable, robust and secure networks are ready for deployment in industrial settings. This course will cover the most relevant details associated with industrial wireless systems with an emphasis towards how the various technological choices coexist, interoperate and interact with each other. Numerous examples of real-world deployments are covered for facilities such as SCADA systems, petrochemical plants, electrical power generation and transmission systems.

Registration link: Industrial Wireless Systems (IC85C)—IL

Safety Instrumented Systems: The Must Know for Implementation (ISA code EC50C)
Date: Monday, 11 May 2009
Instructor: Paul Gruhn
Duration: 1 day
ISA Member cost: $495.00  Non-ISA Member cost: $595.00

The greater the level of process risk, the better the safety instrumented system (SIS) performance required to control it. Learn how to define system performance and design systems according to industry standards. Many benefits will be gained from attending this seminar including: understanding the requirements of international standards for safety systems; becoming familiar with the practices/procedures your company will need to implement, in order to satisfy international standards; and, learn the basics of how to design, implement and maintain the optimum, most cost-effective SIS solutions.

Registration link: Safety Instrumented Systems: The Must Know for Implementation (EC50C)—IL

Introduction to Industrial Automation Security and the ANSI/ISA99 Standards (ISA code IC32C)
Date: Monday, 11 May 2009
Instructor: Tim Shaw PhD CISSP
Duration: 1 day
ISA Member cost: $495.00  Non-ISA Member cost: $595.00

Understanding how to secure factory automation, process control, and SCADA networks is critical if you want to protect them from viruses, hackers, spies, or saboteurs. This seminar teaches you the basics of the ANSI/ISA99 Security for Industrial Automation and Control Systems standards and how these can be applied in the typical factory or plant. In this seminar, you will be introduced to the terminology, concepts, and models of ANSI/ISA–99 cyber security. As well, the elements of creating a cyber security management system will be explained as well as how these should be applied to industrial automation and control systems.

Registration link: Introduction to Industrial Automation Security and the ANSI/ISA99 Standards (IC32C)—IL

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Based in Atlanta, Southern Company is one of the largest generators of electricity in the nation, serving both regulated and competitive markets across the southeastern United States. We participate in all phases of the electric utility business with more than 42,000 megawatts of electric generating capacity and a grid of transmission and distribution lines that would more than circle the earth. Southern Company and its subsidiaries have been serving the Southeast for more than 100 years.

We have two exciting Birmingham based opportunities within our I&C Support group. The Support Specialist and Support Engineer job opportunities can be found, along with other Southern Company openings, on our careers website. Simply log onto [http://careers.southerncompany.com](http://careers.southerncompany.com) and reference job requisition number SCS2000334 for the Specialist (a non-degreed position) and SCS2000335 for the Engineer (degree required); other opportunities at Southern Company are posted regularly, so the web site is a good one to check periodically.

Below is a brief summary of the type of job experience we are looking for in a successful candidate for these two particular openings:

**Desired job experience for both positions:**

Extensive experience and knowledge is required in process controls and control strategies, boilers and auxiliary equipment, and DCS systems. Knowledge of wall fired coal burning drum boilers and associated control strategies is desired (corner-fired and supercritical experience would be a plus). Experience is required in the maintenance, troubleshooting and tuning of DCS boiler control systems. Demonstrated ability to adjust tuning as required on a coal-fired boiler, including unit master integrated coordinated control and remote load control. Experience and knowledge of controls associated with balanced draft, selective catalytic reduction and flue gas desulphurization equipment is a plus.

If you have this type of experience and you are looking for an opportunity with a premier energy company, we want to hear from you.
**Power Surfing**

Allan (Zeke) Zadiraka, a member of the ISA POWID Executive Committee, has provided the following listing of reference material that is available free of charge through the Internet. We thank Zeke for his technical contributions to this newsletter. In Zeke’s words:

While a number of university instructors place course material online for access by their students and others, the Massachusetts Institute of Technology has a formal program in place called OpenCourseWare which has on the order of 1800 courses available.

To quote from their web site at:
http://ocw.mit.edu/OcwWeb/home/home/index.htm

“MIT OpenCourseWare (OCW) is a web-based publication of virtually all MIT course content. OCW is open and available to the world and is a permanent MIT activity.”

“MIT OpenCourseWare is a free publication of MIT course materials that reflects almost all the undergraduate and graduate subjects taught at MIT.”

Some of the many courses that may be of use to ISA Power Industry Division members are:

- **22.921 Nuclear Power Plant Dynamics and Control**

- **22.00J Introduction to Modeling and Simulation**
  http://ocw.mit.edu/OcwWeb/Nuclear-Engineering/22-00JSpring-2006/CourseHome/index.htm

- **2.60 Fundamentals of Advanced Energy Conversion**

- **22.313J Thermal Hydraulics in Power Technology**

- **10.450 Process Dynamics, Operations, and Control**

- **1.040 Project Management**

**Best Papers from the 2007 ISA POWID/EPRI Conference**

During the Honors and Awards Luncheon on 9 June in Scottsdale, Arizona, the Best Paper Award, Second Place, for the 2007 POWID Conference in Pittsburgh was presented to Dale P. Evely. That technical paper is provided in its entirety in this newsletter for your reading pleasure.

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Promote your products and services to a very specific, focused readership of power industry instrumentation and control engineers and managers by advertising in this newsletter. Advertisements will run for 3 consecutive issues (typically March, July and November) based on the payment schedule below.

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**POWID Newsletter Archive**

If you are an ISA POWID Member, then you not only have access to this newsletter but to an archive of past newsletters as well. To access these newsletters, you must login to the ISA web site. They are then available through the “newsletter” choice on the left side of the page. The direct link to these past newsletters is: http://www.isa.org/MSTemplate.cfm?Section=Newsletter7&Site=Power_Industry_Division&ContentID=73659

In addition to the past newsletters, there is a link at the top of the newsletter list to a past newsletter index, in Microsoft Excel format, that is word searchable. It is hoped that this index will make finding information in past newsletters easier and thus more beneficial.
ASME Code Considerations Associated with Steam Drum Level Measurement

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Birmingham, Alabama 35242

KEYWORDS
Steam Drum Level Measurement, Gauge Glasses, Gage Glasses, ASME BPVC Requirements

ABSTRACT

Boiler steam drum level gage glasses have a tendency to fall into disrepair, especially on outdoor units. To improve this situation, a lot of questions have arisen concerning a desire to remove these devices and replace them with other level indication technologies. This paper will explore this issue and describe some areas of concern related to the ASME Boiler and Pressure Vessel Code (BPVC) requirements.

INTRODUCTION

Boiler steam drum level gage glasses have historically required a high level of maintenance. This is most likely due to their being a combination of glass and metallic components that must hold back steam and water at high pressure and temperature. Thermal cycling of these devices, as the boiler is started up and shutdown, also contributes to the maintenance problems. The maintenance issue has led many who are responsible for this maintenance to wonder why gage glasses could not be replaced with other drum level indication technologies that are not as prone to leakage. The purpose of this paper is to outline the author’s understanding of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) requirements in the area of gage glass replacement technologies and to provide his opinion as to a reasonable approach to addressing this issue. The reader is expected to review the ASME requirements and develop an independent understanding of those requirements before putting into practice any recommendations suggested.

ASME DRUM LEVEL INDICATION REQUIREMENTS OVERVIEW

Section I of the ASME BPVC defines the Rules for Construction of Power Boilers\(^1\). A power boiler in this context is any boiler that generates steam at a pressure of more than 15 PSIG. Part PG of Section I defines the General Requirements for all Methods of Construction with PG-60.1 stating the

\(^1\) The ASME Boiler and Pressure Vessel Code, Section I, 2007 edition.
requirements for Water Level Indicators. When a boiler operates at no more than 400 PSIG it is only required to have one gage glass. PG-60.1 describes a gage glass as “a transparent device that permits visual determination of the water level”. If the boiler is meant to operate at more than 400 PSIG then two gage glasses are required, unless certain additional measurement systems are provided. If at least one gage glass is not visible to the operator in the area where water level is controlled then additional provisions must also be made.

A summary of some of the ASME additional measurement provisions mentioned above is as follows:

- above 400 PSIG two gage glasses per steam drum are needed
- one of these two gage glasses may be replaced by two independent (indirect) remote indicators; if both remote indicators operate reliably you may valve out the gage glass but it must be kept serviceable
- one gage glass (or two indirect remotes) must be readily available to the operator in his operating location
- mirrors and fiber optics can be used to direct read the gage glass image remotely (considered a direct remote)
- indirect remotes must be viewable by the operator at all times if used to replace a gage glass

The ASME gage glass requirements have prompted those subject to the BPVC to ask for many formal interpretations from ASME over the years in an apparent effort to eliminate gage glasses and their associated mirrors or fiber optic systems. A summary of some of these ASME formal interpretations is as follows:

- a computer terminal may be used to provide a remote boiler water level indication (Vol 27 I-89-53)
- continuous, uninterrupted indication of boiler water level from two remote level indicators is required if the gage glass is valved out (Vol 27 I-89-53)
- even though a level indicator does not require a power supply that does not make it a gage glass (Vol 29 I-89-73)
- viewing a gage glass via a system of mirrors is considered a direct indication of boiler water level (Vol 30 I-92-15)
- a remote computer terminal that displays boiler water level indication only on demand is not considered to be a continuous, uninterrupted indication of boiler water level from a remote indicator (Vol 33 I-92-63)
- a magnetic level indicator (flipper gage) is an indirect indication of water level (Vol 34 I-92-69)
- a magnetic level indicator is not considered to be a boiler gage glass (Vol 35 I-92-96)
- a pressure compensated dP transmitter remote readout is considered an indirect indication of boiler water level (Vol 36 I-95-04)
- a distributed digital control system (DCS) that displays boiler water level graphically but requires a keystroke to become visible is not considered to be a continuous, uninterrupted indication of boiler water level from a remote indicator (Vol 37 I-95-07)
- a device that provides water level indication must comply with the rules of Section I of the BPVC (Vol 44 I-98-03)
- when one of two gage glasses is replaced with two independent remote indicators each indicator must be an independent system that continuously measures, transmits, and displays water level; the same signal processing algorithm can be used for each of the two indicators (Vol 51 I-01-19)
It should be noted that each time the ASME BPVC is revised an attempt is made, where reasonable, to clarify language in the code that prompted a formal interpretation to be requested. That is the reason why a read through of the latest version of the code might have you asking why someone asked for some of the above interpretations in the first place.

The above ASME BPVC review tells us that, for boilers with maximum allowable working pressure (MAWP) above 400 PSIG, you can remove one of your two gage glasses and throw it away, as long as you have two independent, remote water level indicators that continuously measure, transmit and display boiler water level. Even better news is that if your two independent remote water level indicators are operating reliably you can valve out your gage glass and keep it valved out, but you must maintain the gage glass in a serviceable condition. It should, however, be a lot easier to keep a gage glass in serviceable condition if it spends most of its time in a valved out state.

**MAGNETIC LEVEL INDICATORS ARE NOT GAGE GLASSES**

The popularization of magnetic level indicators in the early 1990's led many to consider them to be a replacement for gage glasses. Even though formal interpretations from ASME related to magnetic level indicators were issued in 1993 and 1994, the PG-60.1 description of a gage glass as “a transparent device that permits visual determination of the water level” was not added to the code until the 2004 edition of the document. Many people today who do not look at the code itself are not aware that ASME does not consider magnetic level indicators to be a direct indication of water level. The author does not know the thought process that ASME has applied to this subject but it is possible that the ASME opinion is based on there being moving parts within the device that can hang up or the possibility of demagnetization of the device in the presence of electromagnetic fields. It is also true that you do not “directly” view a water level with these devices. Magnetic level indicators, however, are available from a number of manufacturers and are a useful technology for use as indirect water level indication in boilers as long as their limitations are kept in mind.

**A NEED FOR PRESSURE COMPENSATION**

Gage glasses, magnetic level indicators, electrode column type level indicators and any other technology that utilizes measurement of a level in some type of a water column external to the steam drum all have an error associated with their level indication that needs to be considered. The ASME code does not discuss this directly for gage glasses but it does mention in PG 60.2.1, regarding the water columns that the gage glasses connect to, that the water column must be correctly positioned “relative to the normal water level under operating conditions”. Most boiler manufacturer’s gage glass installation drawings will show two different gage glass readings for normal water level cold and normal water level at normal operating drum pressure. Boiler gage glasses are typically mounted with their centerlines at the elevation that matches normal water level (NWL) at normal operating drum pressure. This, of course, gets more complicated if the boiler drum is outdoors, where ambient temperatures vary more widely, or if the steam drum pressure slides such that there is no “normal” operating drum pressure.
The physics behind gage glass error is that, at operating pressures, the leg of water in the gage glass is somewhat cooler than the water in the steam drum. Cooler water is denser so it will take a shorter leg of water on the outside of the steam drum to balance the leg of water on the inside of the steam drum. This situation is shown graphically in Figure 1 below.

Even though you understand the physics you might believe that the temperature affect is only minor in nature. An example is in order to provide a better understanding of the situation. A typical arrangement for many large power boilers is as follows:

- Drum level measurement tap spacing: 30 inches
- Normal operating steam drum pressure: 2550 PSIG
- Drum temperature at this pressure: 672ºF

Water level indication errors due to the temperature affect for the above example would calculate as follows (see Appendix A for an example of how this is calculated):

- Gage glass 10ºF cooler than the steam drum gives a 1.1 inch indication offset
- Gage glass 20ºF cooler than the steam drum gives a 1.8 inch indication offset
- Gage glass 30ºF cooler than the steam drum gives a 2.4 inch indication offset
- Gage glass 100ºF cooler than the steam drum gives a 4.5 inch indication offset

From the above example, a conclusion could be reached that gage glasses are not only maintenance issues but they also have uncertainties associated with the level they indicate that should also be kept in mind. For very large steam drums with tap spacing greater than 30 inches, and for drums in outdoor service, the measurement uncertainty associated with an uncompensated water column type of a measurement could be much greater than the example cited above.

**AN APPROACH TO CONSIDER**

Gage glass maintenance issues, the measurement uncertainties associated with water column type measurements, and the addition of a large number of outdoor installed heat recovery steam generators (HRSGs) with large steam drums and large measurement tap spacing led the author and Southern...
Company to develop an alternate approach to address these issues. This section of the paper describes that approach.

A general outline of the resulting Southern Company approach is as follows:

- install one gage glass and keep it serviceable (valved out most of the time)
- install three differential pressure (dP) based level transmitters and three pressure transmitters utilizing three separate sets of drum taps
- utilize electronic signal isolators to wire all six transmitters to two separate sets of digital control system (DCS) analog input cards, with each set of input cards associated with a different digital control system logic solving processing unit
- provide redundant transmitter power supplies and redundant logic solving processing units as a part of the DCS equipment
- perform drum level pressure compensation calculation algorithms in the separate logic solving processing units and have each logic solving processing unit drive a separate analog output and a separate panel board mounted indirect indicator indicating the median of the three sets of pressure compensated transmitters
- perform the steam drum level control, alarm and trip functions using the median of the three pressure compensated signals within one of the two logic solving units mentioned above
- as an option, install a magnetic level indicator on the drum end opposite the installed gage glass for local level indication purposes

The above approach has been implemented on all of the recent combined cycle units Southern Company has added to its fleet and has been retrofit on most of the older units of that type. This approach eliminated control room mounted electrode column type level indicators, which had been a continuing source of confusion. The confusion associated with the electrode type indicators on these outdoor units was due to the sliding pressures of the steam drums causing the electrode indicators to rarely agree with the pressure compensated drum level indications that were being used to control the steam drum levels.

The above approach has also been recommended for consideration by the installed base of Southern Company fossil steam units to address concerns with gage glass maintenance issues and the potential inaccuracies of uncompensated direct and indirect drum level indications that are available within some of our older control rooms. Implementing this approach can be done at a minimal cost when triple redundant pressure and level transmitters are already installed and where DCS equipment with multiple processors and spare input/output cards are already in place or being planned for installation.

A simplified diagram of the Southern Company approach appears as Figure 2 on the next page. The LG in that diagram represents the gage glass.
FIGURE 2 – SOUTHERN COMPANY MEASUREMENT APPROACH

The “LI” in Figure 2 alongside the steam drum represents the optional magnetic level indicator. The “LI’s” at the bottom of the diagram are panel board mounted large case indicators.

CONCLUSIONS

The author believes that the panel board mounted large case indicators represented at the bottom of Figure 2 meet the ASME BPVC requirements to allow the elimination of one of the two gage glasses that are required for a power boiler that normally operates above 400 PSIG. This is because each of these remote indicators is a part of an independent system that continuously measures, transmits, and displays water level. Keeping both of these remote indicators operating in a reliable fashion should also meet the ASME BPVC requirements that allow operating with a gage glass or gage glasses in a valved out but serviceable state. Implementing this approach also provides two indirect remote indicators in the control room that should always agree with the drum level signal that is being used for control purposes and thus eliminate a source of confusion for the boiler operator.
REFERENCES


APPENDIX A – Sample Calculation of Site Glass Temperature Affect Indication Error

--- Top Tap ---

Steam

A = 15 inches

--- Normal Water Level ---

Water

B = 15 inches

--- Bottom Tap ---

Steam Drum Normal Operating Pressure = 2550 PSIG

Steam Drum is at Saturation Temperature = 671.9 degF

Site Glass Water Temperature = D = 661.9 degF

Since this is a closed system the weight of the column of water and steam in the Steam Drum must equal the weight of the column of water and steam in the Site Glass. We can therefore write the following equations:

Steam Drum column weight = (A * Wsd) + (B * Wwd)

Site Glass column weight = [(A + C) * Wsd] + [(B - C) * Wws]

where: A, B and C are as defined in the sketch above

Wsd is the specific weight of steam @ the drum pressure and saturation temperature (lb/ft³)
Wwd is the specific weight of water @ the drum pressure and saturation temperature (lb/ft³)
Wws is the specific weight of water @ the site glass temperature (lb/ft³)

Setting the above two equations equal and solving for the offset (C) we get:

(B * (Wsd - Wws)) - (B * (Wws)) = C * (Wsd - Wws)

so C = \frac{B * (Wsd - Wws)}{(Wsd - Wws)} in inches

For our conditions the Offset C = 1.1 inches

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New and Returning POWID Members

October 2008 through January 2009

The Power Industry Division (POWID) of ISA continues to grow. We would like to welcome all of our new and returning POWID members. We hope you will take advantage of everything POWID has to offer for your work and your career including the opportunity to network with power industry professional colleagues across the globe. Our primary goal is to provide a means for information exchange among engineers, scientists, technicians, and managers involved in instrumentation and control related to the production of electricity. POWID is active in developing industry safety and performance standards, working closely with two ISA standards committees—ISA SP67, Nuclear Power Plant Standards, and ISA SP77, Fossil Power Plant Standards. The Division also conducts technical training and sponsors awards for power plants and individuals advancing instrumentation and control within the power industry. POWID welcomes your involvement in our division activities. Opportunities are available to provide information for our newsletter and web site, to develop papers for presentation at our annual conference, and to participate in our division’s management structure. It’s a great way to get to know other industry professionals, to gain professional recognition, and to keep informed!

New POWID Members
October 2008–January 2009

Mr. Jay Abrahimzadeh, Sr. Development Engineer, Control Component Inc CCI, USA
Mr. Abdullah Hussain Alkhalifah, Engineering Specialist, Saudi Aramco, Saudi Arabia
Mr. Yahya Bello, I & E, Chevron Nigeria Limited, Nigeria
Mr. Amit Bhargava, Associate Director, India
Mr. Sean Daniel Carron, Chief Engineer, Canada
Mr. Michael H. Dean, Sr. I & C Engineer, USA
Mr. Kenneth Ditto, Control Systems Engineer, USA
Mr. Christopher B. Doyel, I&C Engineer, USA
Mr. Michael B. Fedenyszen, I&C Engineer, R G Vanderweil Engineers Inc., USA
Mr. Paolo R. Ferrato, Supervising Engineer, USA
Ms. T S Gayathri, Sr Engineer, P B World, India
Mr. Paul E. Goettler, Territory Sales Manager, Control Analytics Inc., USA
Mr. Ardie J. Harrison, Controls Engineer V, Proto-Power, USA
Mr. Bradley W. Hauser, CCST, Automation & Controls Specialist, USA
Mr. Brian Hoffa, Product Manager, ITT Pure-Flo, USA
Mr. Ray Holgate, O&M Supv IV, Salt River Project, USA
Mr. Riaz Hussein, Instrumentation and Controls Engineer, USA
Mr. Trodhie S. Irlandez, Group Leader Electrical & Instrumentation, Canada
Mr. Jason M. Kates, Alloy Metals and Tubes Intl., USA
Mr. Robert Keys, Sentry Equipment Corp., USA
Ms. Sandra Krauthamer, Analyzer Engineer, Chevron Products Co., USA
Mr. Justin Lane, Project Engineer E/I, USA
Mr. Gbolahan Isah Lawal, GIL Automations and Controls Services, Nigeria

Mr. Robert S. Lefley, IV, Gen Mgr, CML Enterprises Inc., USA
Mr. Biswa Mukherjee, India
Mr. Claus R. Nielsen, Country Manager, PR Electronic, Spain
Mr. James Jay Pritchett, PE, Lead Engineer, Progress Energy, USA
Mr. Sieunarine Ramkumarsingh, E & I Plant Engineer, Trinidad & Tobago
Mr. Karl Rony, Rony Labs, USA
Mr. Tulsi Prosad Sengupta, Chief Engineer (Instrumentation), India
Mr. John F. Shanahan, Owner, Power Systems Dynamics, USA
Mr. David S. Slepoda, President, F&E Engineering Services, USA
Mr. Leo Slegt, Commissioning Engineer, Instrucontrols, Netherlands
Mr. Kevin McCarlos Stevenson, Automation Specialist, Wildcat Electric Supply Ltd., USA
Mr. Zavier L. Thomas, I & E Technician, USA
Mr. Joe Weiss, Kema Consulting, USA
Mr. Michael West, Shift Manager, USA
Mr. Michael D. Whitt, CCST, I & C Department Manager, Mesa Associates Inc., USA
Meeting: ISA Power Industry Division Executive Committee Meeting
Chairman: Daniel Lee
Recorder: Cyrus Taft
Date/Time: October 13, 2008, 1:00 PM To 5:00 PM, EST
Location: Westin Galleria Hotel, Houston, TX

Attendees:

<table>
<thead>
<tr>
<th>Members Present</th>
<th>Members Absent</th>
<th>Others Present</th>
</tr>
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<tbody>
<tr>
<td>Don Andrasik</td>
<td>Dan Antonellis</td>
<td>Paul Goodson</td>
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<tr>
<td>Jim Batug</td>
<td>Dale Evely</td>
<td>Mike Marlowe</td>
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<td>Gary Cohee</td>
<td>Ron Hicks</td>
<td>Rich Sommerfield</td>
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<td>Don Christopher</td>
<td>Roger Hull</td>
<td>Fred Stearns</td>
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<tr>
<td>Danny Crow</td>
<td>Aaron Hussey</td>
<td>Michael Fedenyszen</td>
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<td>Jody Damron</td>
<td>Gordon McFarland</td>
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<td>Bob Hubby</td>
<td>Jason Makansi</td>
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<td>Tim Hurst</td>
<td>Jim Olson</td>
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<tr>
<td>Daniel Lee</td>
<td>Bob Queenan</td>
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<td>Don Labbe</td>
<td>Michael Skoncey</td>
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<td>David Roney</td>
<td>Bill Sotos</td>
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<td>Leo Staples</td>
<td>Joe Vavrek</td>
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<td>Tom Stevenson</td>
<td>Robert Webb</td>
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<tr>
<td>Cyrus Taft</td>
<td>Marjorie Widmeyer</td>
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<tr>
<td>Allan Zadiraka</td>
<td>Denny Younie</td>
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1. Call to Order
Daniel Lee, ISA Power Industry Division Director, called the meeting to order at 1:00 p.m. MST.

2. Introduction of Attendees
Dan Lee asked the attendees to introduce themselves. Cyrus Taft, POWID Secretary and Director-Elect, circulated the Meeting Attendance List and POWID Executive Committee Roster. Director Lee requested that the attendees update the POWID roster personal information including active ISA position.

Action: Cyrus Taft to update EXCOM roster and distribute to EXCOM members.

3. Review & Approve Agenda
The POWID Executive Committee Meeting Agenda previously sent by email was also distributed before the start of this meeting by Director Elect/Secretary Taft. Danny Crow moved that the agenda be approved as distributed and Gary Cohee seconded the motion. The agenda was approved by voice vote.

4. Review & Approve Minutes of Last Meeting
The minutes for the POWID EXCOM meeting held on June 10, 2008, at the Hilton Scottsdale Resort in Scottsdale, AZ were previously distributed electronically to the POWID EXCOM members and are available on the POWID web site. Hard copies of the minutes were also distributed at the meeting. With no changes to the minutes, Dan asked for a motion to approve the minutes as distributed. A motion was made and seconded that the minutes be approved. The minutes were approved by voice vote.

5. Director Staff Reports
a) Division Report—Director Lee reported on the following;
   a1) New Director-Elect
       Dan announced that Don Labbe had accepted the Director-Elect position on the Board.
   a2) 2009 POWID Budget
       Dan distributed the 2009 POWID budget which was developed by ISA Staff and reviewed by Dan and Cyrus. This budget will be submitted to the ISA Finance committee for approval. Dan explained that the budgeting process has changed starting in 2009 with ISA Staff now responsible for developing the budget. Also, the budget only contains expense items now and ISA wants its Divisions to focus on developing good technical content for their members rather than trying to develop a balanced budget.
   a3) 2009 Fall Leaders Meeting
       Dan and Cyrus attended the Fall Leaders meeting on Oct. 11 and 12. Dan and Cyrus attended the A&T and I&S Department meeting on Sunday Oct. 12 and the meeting agenda was provided. Earlier this morning the Society Delegates voted on changing the Society’s name to International Society of Automation along with several other Member Service initiatives. Note: It was learned later that all items had passed.
   a4) POWID List Serve
       Dan used the POWID List Serve three times for his Director’s Message, a call for 2009 papers, and to solicit new members for standards committees.
   a5) Inside Automation Daily
       ISA has begun a new daily email called the Inside Automation Daily. This email provides the latest news related to the automation industry.
   a6) EXCOM FTP Site
       ISA has established an FTP site within the ISA web site just for use by POWID EXCOM members. It is intended to be a place for saving and sharing documents related to the operation of the POWID division. Dan recently re-sent information about how to use the FTP site to all EXCOM members and would like some feedback on the system.
   a7) ISA Soliciting Volunteers
       ISA is soliciting division leaders who may be interested in serving as Department Vice-Presidents or other Society level positions.
   a8) 2010 Boy Scout Jamboree
       The 2010 Boy Scout National Jamboree will be held in Virginia and ISA is exploring the possibility of having an exhibit to promote the automation profession.
   
   b) Financial Report—Roger Hull, (Treasurer) was not in attendance so Dan reported for him:
   b1) 2nd Quarter 2008 Division Financial Statement
       The 2nd Quarter 2008 Division Financial Statement showed the Division fund balance on 6/30/08 was $6080 excluding the POWID Symposium balance. Dan reported on a meeting Cyrus and he had with Ken Hilgers on Sunday to review ISA financial reporting for divisions. The main topics were the 2007 Symposium Outside Services Expenses (see b4 below) and changes in
the way division finances will be handled in the future. Ken explained that ISA could provide more detailed accounting reports for the Divisions but it was not really worth the effort. POWID’s budget is less than 1% of ISA total budget. For 2009 ISA will assume all responsibilities for Division financials. Ken was not sure whether quarterly reports will be issued in 2009. In the future, ISA will develop the division budget based on what POWID includes in their business plan. Deficit budgets may be acceptable of the projected expenditures will improve the division’s service to its members. ISA wants its Divisions to focus on providing technical content to their member rather than making a “profit.”

In the past POWID and other divisions were able to accumulate a surplus which could be carried over from year to year. This will not be allowed starting in 2009 so POWID needs to decide what to do with any surplus remaining at the end of 2008. Dan suggested that the 2008 POWID surplus could be put into our Endowment Fund with the possibility of funding a new award for best student paper. Discussion followed. Tim Hurst made a motion to “put any POWID surplus funds at the end of 2008 into the POWID Endowment fund unless a better idea surfaces before the end of the year.” Gary Cohee seconded the motion. The motion passed by voice vote.

**Action:** Dan will seek additional ideas before the end of the year.

b2) 2nd Quarter Symposium Financial Statement

The 2nd Quarter 2008 Symposium Financial Statement showed a balance of $80,376 because the expenses for the Symposium have not been recorded yet. The 3rd quarter report was just released and shows a surplus of $1,827 after expenses.

b3) Endowment Fund Report

Payments have been made for the 2008 Hubby Scholarship, 2005 Achievement Award Scholarship (Jeff Williams) and 2007 Achievement Award Scholarship (Bob Smoak). The status of the 2008 Achievement Award Scholarship (Allan Zadiraka) is not known.

b4) 2007 Symposium Outside Services Expenses

Dan and Mike Skoncey reviewed ISA’s breakdown of the Outside Services Expenses from the 2007 Symposium and prepared a Budget Critique memo for ISAs comments. The memo was discussed with ISA as reported in item 5.b.1.

b5) 2009 POWID Division Budget

ISA has developed the 2009 POWID budget and Dan and Cyrus have reviewed it. It has been submitted to the ISA Finance Committee for final approval.

b6) 2008 Student Games

POWID provided $1000 in funds to support the 2008 Student Games at EXPO 2008. Laura Crumpler of ISA sent a nice thank you note to POWID.

c) Automation Federation—At this point the meeting departed from the Agenda for a discussion with two guests, Mike Marlow and Paul Goodson, about the Automation Federation. They wanted POWID to be aware of the Automation Federation’s activities in two areas, Smart Grid and cyber security. They attended Grid Week along with 1400 others. They also have had discussions with Congressional staff members concerning cyber security.

d) Nomination—Gary Cohee reported that the Tim McCreary has resigned from the Board due to new work commitments. EXCOM now has 30 members including 9 Utility, 13 A/E, and 8 Vendors. Dan said the Division is always looking for additional Board members.

6. Standards Committee Reports

a) ISA67 Nuclear Power Plant Standards Committee—Bob Queenan (ISA67 Chair) was not in attendance and did not provide a report.

b) ISA77 Fossil Fuel Power Plant Standards Committee—Dan Lee reported that ISA 77 met in Scottsdale in June and will meet tomorrow at Reliant Center. Dan solicited members for a new Automation subcommittee which will meet tomorrow to draft a scope and purpose. 77.14 Turbine control, 77.82 SCR control, 77.42 Drum level, and 77.70 Instrumentation documentation will all meet this week in Houston.

7. Membership Service Committee Reports

a) Honors & Awards—Michael Skoncey (POWID Honors and Awards Coordinator) was not in attendance but he did submit a short email report. He is working on written guidelines for Achievement Award winners on how to select a scholarship recipient. He will have them ready for the February EXCOM meeting. Allan Zadiraka has not selected a recipient for his Achievement Award Scholarship.

**Action:** Mike Skoncey will prepare guidelines for award winners on selecting scholarship recipients.

**Action:** Allan Zadiraka to select scholarship recipient.

b) Membership—Gordon McFarland was in attendance and provided a membership report. The Division currently has 1922 members which is a gain of 60 over the previous report. We have less than 500 student members. He continues to send emails to members whose membership has lapsed.

c) Historian—Don Christopher, POWID Historian, circulated two CDs which contained electronic versions of two POWID Symposium proceedings from 1982 and 1994. The proceedings had been scanned into a PDF file by FedEx Kinkos for a cost of a couple hundred dollars. Each proceeding was scanned into a single PDF file and the resolution was very good. There was discussion about creating an individual PDF file for each paper in the proceedings. Don agreed to discuss this with Kinkos to see if they could do that and what the additional cost would be. The Division has budgeted $2000 for this activity so Don was requested to have a few more proceedings scanned. Dan Lee said he would take the existing files and split them into individual files to see how difficult it was. The ultimate goal is to get these papers into the ISA online paper database so all members can access them easily.

**Action:** Don C. to check on cost to produce individual PDF files for each paper in the scanned proceedings. He will also have additional proceedings scanned.

d) Professional Development—Tom Stevenson was in attendance and reported that a record number of PDH’s were issued for the 2008 Symposium. The PDH lists have been scanned into PDFs and put on the POWID FTP site. He did not make the Professional Development Department (PDD) Board meeting yesterday.

e) Section/Division Liaison—Bob Hubby, POWID Section/Division Liaison, did not have a report. He will update his resource list in the spring.

Note: Dan Lee had to leave the meeting temporarily so Cyrus Taft presided in his absence.
8. Communication Committee Reports

a) Newsletter—Dale Evely (POWID Newsletter Editor) was not in attendance but provided a written report. The Summer 2008 newsletter was published on August 8.

b) Publicity—Joe Vavrek (Publicity Coordinator) was not in attendance and did not provide a report. Brian Nessen of TradeFair Group sent a letter to Dan suggesting that POWER magazine select about 6 papers from the Scottsdale Symposium to publish in a special issue of POWER in early 2009 dedicated to instrumentation and control issues. He also committed to using other POWID papers in their Coal Power E-Zine online magazine.

c) Web Page—Allan Zadiraka (POWID WEB Page Coordinator) announced that he would not be able to continue as web page coordinator and Gary Cohee agreed to resume his role as Web Page Coordinator. Gary mentioned that he is looking for old newsletters to scan and put on the web site. ISA has not incorporated POWID’s suggestion for an easier symposium registration page for non-members so they don’t think they have to be an ISA member to register. The POWID EXCOM FTP site is up and running but not too many members have used it yet. There is already a lot of information there. ISA has not established the Power Community yet. COM FTP site is up and running but not too many members have used it yet.

d) External Marketing—Jason Makansi, External Marketing Coordinator, was not in attendance and did not provide a report.

e) ISA Marketing—Dan reported that Becky Schneider is the new ISA Division marketing coordinator. ISA is starting a new “Get Involved” campaign to promote Division membership to ISA members who are not Division members. ISA will also start sending notices to lapsed members to remind them to renew their division memberships. POWID already does this.

9. ISA POWID/EPRI Conferences (POWID Symposia)

a) Phoenix, AZ—June 8-15 2008—Denny Younie (General Chair) was not in attendance but did provide a report. Don Labbe (Program Chair):

a1) The total registration was 226 which included 56 authors, 112 full registrations, 18 on-site registrations and 10 one day registrations.

a2) The conference ended with a surplus of $1,827 despite an unexpected additional food and beverage expense of about $20,000.

a3) Five lessons learned are included in the report.

a4) There were more nuclear sessions this year thanks to a special effort by Tim Hurst and Jason Makansi.

a5) This was the first year that POWID has allowed presenters to provide a Powerpoint only without a formally reviewed paper. This was done primarily to accommodate several nuclear authors who could not have participated otherwise. For 2008 the rules for Powerpoint only were decided “on the fly” due to time constraints. The plans for Powerpoints in 2009 were discussed in some detail.

a6) Powerpoint only rules for 2009 are as follows: Powerpoint only presentations will be allowed

• The standard copyright release form will be used for the Powerpoints.

Action: Jim Batug to revise author instructions to incorporate rules for Powerpoint only presentations.

b) Chicago (Rosemount), IL, May 12–14, 2009, Co-located with Electric Power—Leo Staples was in attendance and reported:

b1) Leo has been attending the Electric Power planning meetings in Chicago. Everything seems to be going smoothly at this point.

b2) The technical conference will start on Tuesday instead of our usual Monday. The morning session will include a joint keynote speaker and a talk by the ISA President.

b3) 27 abstracts have been submitted to date.

b4) There will be standards meetings on Monday.

b5) A Technical Program review meeting was held earlier this morning. Jim Batug described the program status. Program support from EPRI has been lacking. Cyrus will discuss this with Aaron Hussey.

b6) One fossil session on carbon capture is up in the air.

Action: Cyrus to contact Aaron Hussey to discuss EPRI Program Support.

c) Baltimore, MD, May, 2010, Co-located with Electric Power—Dan requested volunteers for General Chair or Program Chair for 2010. No one volunteered. Note: after the meeting Tom Stevenson agreed to be General Chair for 2010.

10. ISA Tech EXPO Conferences

a) Houston TX—October 10–14, 2008—Gary Cohee is the POWID coordinator for the 2008 Expo in Houston. He developed a session in the Environmental and Quality Control Track. Tom Stevenson will chair the session. A couple of other POWID papers are being presented in other sessions. ISA will hold a Division Showcase on Tuesday, Oct. 14 on the Exhibit floor. POWID contributed $350.00 to support this event which is intended to promote division membership to exhibit attendees. Dan and Cyrus will attend. POWID is providing tickets for EXCOM members who signed up for the Honors and Awards Banquet tonight and the I&S and A&T Department Awards Luncheon on Tuesday.

b) Houston TX—2009—Danny Crow is the POWID Program Coordinator for Expo 2009 in Houston. The first physical meeting of the planning committee is at ISA headquarters in January.

11. Old Business

a) Membership Survey—A meeting was held earlier this morning to discuss the membership survey. Don Andrasik is leading this effort. After the morning meeting he revised his draft survey and distributed it for comments. A few changes were noted. The goal is to make the survey very simple to complete. Rodney said that ISA should be able to provide an Ipod as an incentive gift for one lucky respondent. Tim Hurst made a motion that if ISA can not provide an Ipod then the Division will offer a joint keynote speaker and a talk by the ISA President.

Action: Jim Batug to finalize the survey and send to Dan Lee and Rodney.

Action: Rodney to check on possibility of ISA providing an Ipod as an incentive gift.

b) Dehli India POWID Sub-section—Laura Crumpler of ISA
suggested that POWID consider setting up a sub-section in India. Dan Lee will contact the Indians to understand their desires.

**Action:** Dan Lee will send a memo to India Section inquiring about India’s plans and any collaborative possibilities with POWID.

### 12. New Business

#### Division Name Change and Logo—A meeting was held earlier this morning to discuss a possible name change for the POWID division and a new division logo. There was a lively discussion but no action was recommended from that meeting at this time. Cyrus will develop a couple of new logos for consideration at the next EXCOM meeting.

**Action:** Cyrus will develop some modified logo designs to discuss at the next meeting.

### 13. Time & Date of Next Meeting

The next meeting of the Power Industry Division Executive Committee will be held on Tuesday February 10, 2009 from 1-5 pm at ISA Headquarters in Research Triangle Park, NC. Some additional planning meetings will be held that morning. An agenda will be distributed about a month before the meeting.

### 14. Adjournment

Don Labbe made a motion to adjourn. It was approved and the meeting was adjourned at 4:53 pm.

**ISA POWID EXCOM Action Item Summary**

**Action:** Cyrus Taft to update EXCOM roster and distribute to EXCOM members.

**Action:** Dan will solicit additional ideas from EXCOM Members before the end of the year.

**Action:** Mike Skonely will prepare guidelines for award winners on selecting scholarship recipients.

**Action:** Allan Zadiraka to select scholarship recipient.

**Action:** Don C. to check on cost to produce individual PDF files for each paper in the scanned proceedings. He will also have additional proceedings scanned.

**Action:** Jim Batug to revise author instructions to incorporate rules for Powerpoint only presentations.

**Action:** Cyrus to contact Aaron Hussey to discuss EPRI Program Support.

**Action:** Dan Andrasik to finalize the survey and send to Dan Lee and Rodney.

**Action:** Rodney to check on possibility of ISA providing an Ipod as an incentive gift.

**Action:** Dan Lee will send a memo to India Section inquiring about India’s plans and any collaborative possibilities with POWID.

**Action:** Cyrus will develop some modified logo designs to discussion at the next meeting.

### ISA77 Standards Committee Status

The ISA67 standards committees met during the June 2008 ISA POWID Conference in Scottsdale. The minutes from these meetings were not yet available for this edition of the newsletter. It is hoped that minutes can be published in the next edition. The Chair of the ISA67 main committee is Bob Queenan of Sciencent in Idaho Falls, Idaho.

### ISA77 Standards Committee February 2009 Meeting Minutes

**Meeting:** ISA77 Fossil Fuel Power Plant Standards Committee

**Chairman:** Bob Hubby/Dan Lee

**Recorder:** Dan Lee/Jennifer Crumpler

**Date/Time:** February 11, 2009

**Location:** ISA Headquarters, RTP, NC

**Distribution:** ISA77 Committee and Subcommittee

**Attendees:**

- Dan Lee
- Cyrus Taft
- Henrik Johansen
- Allen Zadiraka
- Jerry Gilman
- Thomas McAuliffe
- Gordon McFarland
- Jennifer Crumpler (ISA Staff)

**Call to Order**

The ISA77 Fossil Fuel Power Plant Standards Committee meeting was called to order at 3:30 PM EST by ISA77 Co-Chair, Dan Lee.

**Introduction of Attendees**

Dan Lee welcomed everyone and asked everyone to introduce themselves. Dan circulated an attendance list and ISA77 committee roster for members to sign and update.

**Review & Approve Agenda**

The October 14, 2008 ISA77 committee minutes was distributed electronically to the ISA77 committee and posted on the ISA77 website. Hard copies were available to attendees. Dan Lee requested a motion to approve the Oct 11 ISA77 meeting agenda passed.

**Review & Approve Minutes of Last Meeting**

The October 14, 2008 ISA77 committee minutes was distributed electronically to the ISA77 committee and posted on the ISA77 website. Hard copies were available to attendees. Dan Lee requested a new agenda item b (VGB Liaison) be added to New Business. With no additional agenda items suggested, a motion to approve the agenda was made by Gordon McFarland, and Cyrus Taft seconded the motion. Via voice vote, the Feb 11 ISA77 meeting agenda passed.

**Review & Approve Minutes of Last Meeting**

The October 14, 2008 ISA77 committee minutes was distributed electronically to the ISA77 committee and posted on the ISA77 website. Hard copies were available to attendees. Dan Lee requested a new agenda item b (VGB Liaison) be added to New Business. With no additional agenda items suggested, a motion to approve the agenda was made by Gordon McFarland, and Cyrus Taft seconded the motion. Via voice vote, the Feb 11 ISA77 meeting agenda passed.

**Co-Chair Opening Remarks**

Dan Lee commented that the co-chair partnership with Bob Hubby is going well, and that Bob could not join us in-person today. He encouraged everyone to read the new S&P manual, citing the changes made would not effect on how the ISA77 committee operates. He also mentioned that the ISA Style Guide has not been updated; instead ISA is asking editors to refer to the IEC style.

**Action:** Jennifer to verify if a link to the IEC webpage can be added to the ISA77 webpage and/or the ISA member’s resource page.

**Managing Director Opening Remarks**

Gordon McFarland (Managing Director for ISA77) stated that he is planning to attend the S&P spring leaders meeting held June 13–16, 2009, in Indianapolis, IN.
# ISA77 Active Subcommittee Reports

<table>
<thead>
<tr>
<th>Committee</th>
<th>Published Date</th>
<th>Status (EPR Date)</th>
<th>Chair Report</th>
</tr>
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<tbody>
<tr>
<td><strong>ISA77.10 Turbine Series</strong></td>
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<tr>
<td>ISA77.13 Turbine Steam Bypass Systems</td>
<td>2008</td>
<td>Current Standard</td>
<td>Jeff Schleis was not in attendance. Jennifer reported that ANSI has approved this standard. ISA publication of this document will be complete in a week and should be available to members late February. The published date and status was updated accordingly.</td>
</tr>
<tr>
<td>ISA77.14.01 Steam Turbine Controls</td>
<td></td>
<td>Draft (2009 Q1)</td>
<td>Jeff Schleis was not in attendance but Jeff did send in a report. Dan reported that the ISA77.14.01 last met on Oct 15, 2008 and that Andy Gavrilos took an action item to resolve three outstanding comments. Ballot for ISA77.14.01 was sent to the ISA77 committee with a closing date of February 26.</td>
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<tr>
<td><strong>ISA77.20 Plant-wide Series</strong></td>
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<tr>
<td>ISA77.20 Fossil Power Plant Simulators</td>
<td>2005</td>
<td>Current Standard</td>
<td>Alex Lekich was not in attendance but Alex did send in a report. Dan reported that Alex is at a simulation conference and is recruiting committee members. Alex is planning to hold a teleconference on Feb 20 and a physical meeting during the 2009 POWID Symposium.</td>
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<tr>
<td>ISA77.22.01 Power Plant Automation</td>
<td></td>
<td>New (2011 Q4)</td>
<td>Henrik Johansen was in attendance and reported that a new ISA77.22.01 subcommittee met on October 15 to prepare a scope and purpose for a new standard on Power Plant Automation. The scope and purpose was issued and approved by the ISA 77 committee meeting on October 15, 2008. The ISA77.22.01 subcommittee held a teleconference this morning (02/11/09) and prepared an outline and author assignments. Jennifer reported that the new S&amp;P manual states that approval of a new subcommittee scope and purpose is required by the governing committee and thus, the S&amp;P board does not have to approve a new subcommittee's scope and purpose. This committee was approved during the ISA77 Oct 14, 2008 meeting. A discussion was held on an estimated published (EPR) date for this new standard. A proposed date of 2011 Q4 was agreed.</td>
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<tr>
<td><strong>ISA77.40 Boiler Series</strong></td>
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<td>TR 77.40.01 Functional Diagramming</td>
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<td>Draft (2009 Q4)</td>
<td>Dan Lee reported that the subcommittee met earlier today (02/11/09) and discussed the current status of draft 10. Due to the lack of support for ISO and FF examples the subcommittee agreed to modify the scope and purpose to eliminate IEC collaboration. Once draft 10 has been updated, Dan reported that the document will be issued for ballot. (Action) Dan will inquire with ISA staff and S&amp;P board as to what document number and balloting process should be followed.</td>
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<tr>
<td>ISA77.41.01 Boiler Combustion Controls</td>
<td>2005</td>
<td>Current Standard</td>
<td>No report required. Dan noted that this standard will start the reaffirmation process later this year,</td>
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<tr>
<td>ISA77.42.01 Feedwater Control – Drum Type</td>
<td>2006</td>
<td>Current Standard</td>
<td>No report required</td>
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<tr>
<td>TR77.42.02 Feedwater Controls-Drum Level Measurement</td>
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<td>Draft (2009 Q2)</td>
<td>Jerry Gilman was in attendance and reported that the technical report was issued for ISA77 committee ballot and has been approved with only a few editorial comments. The sub-committee met this afternoon (02/11/09) and resolved the outstanding comments. The estimated published date was updated to 2009 Q2. Jerry Gilman asked if all the SAMA references needed to be removed from all published ISA77 documents. Jennifer stated that the SAMA references are being removed as the documents are being revised or reaffirmed. (Action) Jerry/Jennifer will prepare Draft 5 and issued for public comment. (Action) Jennifer will verify the SAMA reference procedure with ISA Standards Staff.</td>
</tr>
<tr>
<td>Committee</td>
<td>Published Date</td>
<td>Status (EPR Date)</td>
<td>Chair Report</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
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</tr>
<tr>
<td>ISA77.43 Unit Plant Demand Development</td>
<td>2008</td>
<td>Current Standard</td>
<td>Jennifer reported that ANSI has approved this standard. ISA publication of this document will be complete in a week and should be available to members late February. The published date and status was updated accordingly.</td>
</tr>
<tr>
<td>ISA77.44.01 Steam Temperature Controls</td>
<td>2007</td>
<td>Current Standard</td>
<td>No report required</td>
</tr>
<tr>
<td><strong>ISA77.60 HMI Series</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ISA77.60.02 Alarms</td>
<td>2006</td>
<td>Current Standard</td>
<td>No report required</td>
</tr>
<tr>
<td>ISA77.60.04 CRT Displays</td>
<td>2008</td>
<td>Current Standard</td>
<td>No report required</td>
</tr>
<tr>
<td>RP77.60.05 Task Analysis</td>
<td>2007</td>
<td>Current Standard</td>
<td>No report required</td>
</tr>
<tr>
<td><strong>ISA77.70 Instrument Series</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISA77.70 – Instrument Piping Standards</td>
<td>2005</td>
<td>Current Standard</td>
<td>No report required. Dan noted that this standard will start the reaffirmation process later this year. It was noted that this standard did not follow the current ISA number format. A suggestion was made to renumber this standard to ISA77.70.01 and change ISA77.70.01 to ISA77.70.02. (Action) Jennifer will confirm ISA staff recommendation.</td>
</tr>
<tr>
<td>TR-77. 70.01– Tracking and Controlling Instrument Documentation in Fossil Power Plants</td>
<td>Draft 2 (2009 Q4)</td>
<td></td>
<td>Jody Damron was not in attendance. Dan reported that the technical report was issued for ISA77 committee ballot and that not enough ballots have been returned to close the balloting. The sub-committee met this morning (02/11/09) and started to review the comments received to date. Jennifer reported that this standard did not go out to public ballot. (Action) Dan will forward the comment form and updated draft 4 to Jody for completion at a later date. (Action) Dan Lee/Bob Hubby to remind ISA77 committee members to submit their ballots.</td>
</tr>
<tr>
<td><strong>ISA77.80 Post Combustion Series</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISA77.82.01 – SCR Instrumentation and Controls Standard</td>
<td>Draft 8 (2009 Q4)</td>
<td></td>
<td>Cyrus Taft was in attendance and reported that the sub-committee met this afternoon (02/11/09) and is working on draft 8b of the standard. Cyrus reported that the committee has planned a teleconference for April 2 to complete the standard. The intent is to issue this standard for ISA77 committee ballot before the 2009 Symposium.</td>
</tr>
</tbody>
</table>

**Liaison Reports**

**ISA5.1 Sub-Committee**—Dan Lee reported since June 2008, the ISA5.1 committee has held two teleconference meetings and sent numerous emails on specific topics in order to resolve some outstanding issues to draft 6. Resolutions for the various comments were posted for the committee to raise any concerns. Draft 7 was prepared and issue for ISA 5.1 committee ballot and public ballot on 12/12/08. Both the S&P VP (Tom McAvinnew) and ISA 5 Managing Director (Ian Vanhappen) sent email to the ISA 5.1 Committee seeking approval of this standard. Their request was to defer comments for the next revision cycle. With the closing ballot date of January 12, 2009, the ISA5.1 standard has been approved and editorial comments are being addressed by the committee chair.

**IEC TC65 Technical Advisory Group**—Dan Lee reported that he did not renew his IEC TAG membership for 2009 but that the IEC TAB membership form was forward to Dave Rooney who expressed interest in supporting this role. Dave was not in attendance and did not submit a report.

**NFPA 85**—Dan Lee reported that the NFPA 85 committees officially start their next revision cycle on January 8, 2009. The 2010 cycle was closing comments on May 8, 2009. The Fundamental and Multiple Burner Boiler committee have already met to address committee comments. The NFPA 85 F2010 revision cycle has the following milestone dates:

- **Intent to enter cycle** January 9, 2009
- **Proposal Closing** .......................... May 8, 2009
  (May 29 original date)
- **Final date for TC ROP** ........................ Aug 7, 2009
- **Final date for TCC ROP** ......................... October 16, 2009
- **ROP Published and Posted** ..................... December 28, 2009
- **Comment Closing** .............................. March 5, 2010
- **Final date for TC ROC** ........................ April 9, 2010
- **Final date for TCC ROC** ......................... June 18, 2010
- **ROC Published and Posted** ..................... August 27, 2010
- **Intent to make motion (ITMAM)** closing May 29, 2010
- **October 22, 2010 Issuance of standard—NO controversy** January 28, 2011 (publ. bit later) 2011 edition date
- **NFPA WSCE Meeting with NITMAM** ............... June 4-9, 2011
  (published bit later)
- **July 29, 2011** ................................. 2012 edition date
- **IEEE**—Cyrus Taft stated that he was not aware of any related IEEE activities.
- **ASME**—Cyrus Taft stated that he was not aware of any related ASME activities.

**ISA TR84.00.05**—Jerry Gilman reported that the TR84.00.05 committee met in Houston (Oct 2008) and that there were no changes
to sections that POWID had provided comments. The committee work has not resulted in a new revision of the document (“G” is last and current revision). No estimated date of completion exist as the committee chair is on sick leave. Jerry reported that the committee will meet again via conference when Dennis returns and during the ISA Fall Leadership meeting.

ISA101—Bob Hubby was not present and did not submit a report on ISA101. At the October 14, 2008 meeting Bob reported that the ISA101 committee has been meeting and that the committee work is only beginning.

Old Business
ISA77 Web page folder structure—Jennifer reported that the folder structure project has been postponed pending review of a new committee management tool. The existing folder structure will remain until a decision is made by ISA Standards Staff.

ISA77 CD Compilation—Jennifer stated that the 3rd edition of the ISA77 CD release date is undetermined and that she will notify the committee when it is time to edit the 3rd edition. She distributed a copy of the 2nd edition CD contents as information. A suggestion was made to include other standards as resources, in addition to the ISA77 standards (i.e., ISA5.1, 18, 20, 99). The suggestion was also made that the ISA77 CD be used as a POWID resource.

Action: Jennifer to research the addition of other committee standards with the ISA Books and Publishing department.

Action: Dan Lee to explore an ISA77 memo thanking the purchaser and providing additional information.

Committee Balance—Dan Lee reported the current ISA77 committee balance is not per the new ISA guidelines. The ISA77 committee balance is currently reported as: producer, 7 (32%); general, 3 (14%); user, 11 (50%); regulatory/government, 0; testing/certification/approval, 0; architect- eng/engineer constructors/integrators, 2 (4%). Jennifer reported that the ISA members declare their interest category and that ISA's experience has been that the ISA member may not clearly understand the new ISA interest categories. Dan requested that the ISA77 committee interest category be reviewed again to verify the current committee balance. Jennifer stated that the committee balance is important because otherwise ISA has to provide written documentation of member recruitment to ANSI.

Action: Jennifer to send a new interest category form to all committee members for updating.

Action: Dan Lee/Bob Hubby to review all member responses and suggest changes to interest categories to improve balance.

New Business:
Subcommittee Meeting Plans—Several committee chairs requested that a longer period be provided to work on standards. Due to the number of subcommittees requesting time, the committee decided to hold two parallel sessions on Monday May 11. The subcommittees planning to hold physical meetings include:

ISA77.20..................Simulation
ISA77.22.10..............Power Plant Automation
ISA77.40.01..............Function Diagramming
ISA77.70.01..............Tracking and Controlling Instrument Documentation
ISA77.82.01..............SCR

Action: Dan Lee to request two rooms on May 11 to hold ISA77 committee meetings.

Action: Dan Lee/Bob Hubby to confirm subcommittee meeting schedule.

VGB Liaison—Dan Lee reported that Henrik Johansen would agree to serve as the VGB liaison for the ISA77 committee. After some discussion, the committee thanked Henrik for volunteering and looks forward to his reports.

Action: Henrik will investigate the cost and requirements to become a VGB member.

Time & Date of Next Meeting
Dan Lee reported that the next ISA77 committee meeting will be held in coordination with the 19th Annual Joint ISA/POWID/EPRI Controls and Instrumentation Conference (also the 52nd Annual ISA POWID Symposium) scheduled for May 12–14, 2009 in Rosemont, IL. The ISA77 committee will meet on Monday May 11 from 3:30 p.m. to 5:00 p.m.

Adjournment
Dan Lee asked for a motion to adjourn. Cyrus Taft motioned to adjourn the ISA77 committee meeting. Gordon McFarland seconded the motion and via voice vote the ISA77 committee meeting was adjourned at 4:50 pm.