Hello to all of our ISA Power Industry Division (POWID) members.

The preparation of this Director's Message for our POWID Summer 2005 Newsletter, *What's Watt*, takes place just after our 15th Annual Joint ISA POWID/EPRI Controls and Instrumentation Conference has come to a close.

Before discussing our annual conference, I want to make some announcements.

First, on the ISA Society level, one of our POWID Executive Committee Members, Don Labbe, was selected by the ISA Honors and Awards Committee, and approved by the ISA Executive Board, as an ISA Fellow. This is indeed a prestigious honor that ISA bestows on very few select individuals. In addition to being selected as an ISA Fellow, Don was awarded the ISA E.G. Bailey Award. This award recognizes excellence in the design, development or application of instrumentation, systems, and automation in the utilities or process control industries. Congratulations Dan.

Second, POWID held its annual Honors and Awards Program on 6 June 2005, during the Conference. It gives me great pleasure to announce the following award recipients:

<table>
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<th>AWARD</th>
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<tbody>
<tr>
<td>ISA Power Industry Division 2005 Achievement Award</td>
<td>Jeffrey Williams</td>
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<td>ISA Power Industry Division 2005 Outstanding Service Award</td>
<td>Wayne Holland</td>
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<td>ISA Power Industry Division 2005 Facilities Award</td>
<td>Constellation Energy</td>
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<td>C. P. Crane Power Station</td>
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<tr>
<td>ISA Power Industry Division 2004 Best Paper Author</td>
<td>Robert L. Frank</td>
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</tbody>
</table>

Please check inside the newsletter for a full description of these awards, a biographical profile of the recipients for the Achievement and Outstanding Service award, and a photograph of the recipients receiving their plaques at our POWID Honors and Awards Program in Colorado Springs. There is also a reprint of our POWID 2004 Best Technical Paper. My sincerest congratulations to all of our POWID award recipients.

Third, it is my pleasure to inform you that your ISA Power Industry Division has been selected as the ISA “Outstanding Division” among the Industries and Sciences Divisions of ISA’s Automation and Technology and Industries and Sciences Department. POWID was selected by the ISA Honors and Awards Committee and approved by the ISA Executive Board during the ISA President's Spring Meeting in Portland, Oregon. This is the eighth consecutive year that your Power Industry Division has been selected for this prestigious honor. My many thanks to all of the POWID Executive Committee Members and our POWID Members for your support and contributions that made this award and recognition possible. I hope you are able to attend the ISA Honors and Awards Banquet in Chicago, Illinois, on 24 October during ISA EXPO 2005, and see your Director proudly accept this award for our Division. Again, it is all of your collective efforts that have made this honor for our Division possible. Let us also not forget the efforts of our past POWID Directors—Wayne Holland, Gordon McFarland, Roger Hull, Ron Hicks, Bob Hubby—and others who have cleared the path for our Division to consistently achieve this recognition.

I also want to inform you that your POWID Executive Committee approved Goray Mookerjee of DTE Energy as a new Member on your POWID Executive Committee during our meeting held at ISA Headquarters in Research Triangle Park, NC, on 22 February 2005. Welcome aboard Goray.
Continued from page 1

I am very pleased to report that our 15th Annual Joint ISA POWID/EPRI Controls and Instrumentation Conference, held in Nashville, Tennessee, from 6-8 June 2005, was a huge success for the ISA Power Industry Division and for EPRI (Electric Power Research Institute). As our conference name implies, this has been the 15th consecutive year that your ISA Power Industry Division has co-programmed with EPRI and this has been a very successful and rewarding partnership. We look forward to many more rewarding years jointly programming with EPRI for our annual conferences. This was also POWID’s 48th consecutive year to have programmed an annual conference. The success of this conference is due to the countless efforts of many individuals who made up our 2005 Nashville Conference Team, but I want to single out three individuals whose efforts made this success possible. I want to recognize Denny Younie, who served as the 2005 Conference General Chair; Cyrus Taft, who served as the 2005 Conference ISA Program Chair; and Don Labbe, who served as our 2005 Conference Paper Review Coordinator. I want to thank our conference key sponsors who were Emerson, Honeywell, Invensys Power Magazine, and Wood Group. Their contributions help to keep our conference registration fees low. Please look for their banners within our newsletter. We also had twenty-nine vendors participating in our product display booths. We also do not want to overlook the many contributions from our ISA support team of Rodney Jones, Sherrie Gorji, and Loanna Overcash.

Looking at the calendar ahead, the ISA EXPO 2005 Conference and Exhibit will be held again in Chicago, Illinois, from 24-27 October 2005. Dave Roney is our POWID Conference Program Coordinator and our Session Developers are Dave, Cyrus Taft, and Allan Zadiraka. POWID will also be conducting a POWID Executive Committee meeting, standards meetings, and don’t forget the ISA Honors and Awards Banquet on the evening of 24 October.

Our 16th Annual Joint ISA POWID/EPRI Controls and Instrumentation Conference will be held on 4-9 June 2006, at the Doubletree Hotel in San Jose, California, so mark your calendar. We have secured a $122/night rate at the hotel. Marjorie Widmeyer and Bob Webb have volunteered to serve as the ISA General Chair and ISA Program Chair, respectively. Please look for the Call for Papers in this newsletter. Marjorie and Bob are looking for Session Developers, technical paper authors, and panelists for a round table session. We are also looking to partner with key contributing conference sponsors and will have product display booths available. Please contact Marjorie Widmeyer or Bob Webb at the e-mail addresses listed within this newsletter for more details. Details for this conference can also be found on our conference Web site at www.isa.org/powersymp.

Also, your POWID Executive Committee is seeking nominations for the “Robert N. Hubby ISA Power Industry Division Academic Scholarship”. Nominations will come from you, our ISA Power Industry Division Members, not from the students applying for the scholarship. You would be the student’s sponsor. Contact Michael Skoncey mskoncey@firstenergycorp.com, our POWID Honors and Awards Chair, on the application details.

If you look through our summer 2005 Newsletter you will find a solicitation for advertising in future POWID newsletters. If you happen to be a supplier of products or services to the electric power generation industry, please consider advertising those products and services in our newsletter, which is published three times a year.

If you have any questions or suggestions, please send me an e-mail message at garacohee@aol.com.

Best Regards,

Gary Cohee
2005-2006 ISA Power Industry Division Director
Each year the POWID Division of ISA honors its Members with the following awards:

The **Achievement Award** is for the purpose of recognizing individuals whose efforts have advanced the generation of electrical power. These efforts are exemplified through the individual's outstanding achievements, original design application, or special contributions toward the development of engineering concepts in the field of instrumentation and controls within the power industry.

The **Service Award** is for outstanding service in the field of instrumentation. The service of the individual must be noteworthy, exemplary, or exceed the normal duties of the office held. The service is of a nature that advances the stature of the Power Division and/or ISA.

The **Facility Award** was created to honor facilities that demonstrate innovative application of control systems or instrumentation technology within the power industry.

The **Technical Paper Awards** are awarded to four authors whose papers were voted best by reviewers and the Executive Committee (EXCOM) members. The papers that are reviewed to receive this award are the ones that are presented at POWID’s Annual Symposium and ISA’s Fall Conference.

### 2005 POWID Awards

We extend our appreciation and congratulations to the following recipients awarded for their contribution to our industry during the 48th Annual POWID Symposium/15th Joint ISA POWID/EPRI Conference in Nashville, TN:

| 2005 General Chairman          | Denny Younie                                      |
| 2005 Program Chairman          | Cyrus Taft                                        |
| 2005 EPRI Program Chairman     | Brandon Rasmussen                                 |
| 2004 Best Technical Paper Awards |                                              |
| Best Paper:                    | “Integrated Approach to Slagging & Fouling Control at TVA’s Cumberland Fossil Plant” by Robert L. Frank |
| 3rd Best Paper:                | “New Excess Air Controller at Le Havre Power Plant” by Luc Deprugney, and Jean-Baptiste Lites |

### 2005 POWID Honors and Awards in Review

**Luncheon Speaker**

This year’s luncheon speaker was David Bennett (below, on left), Executive Director of the Tennessee Film & Music Commission. Part of his presentation included an up-and-coming country star named Angel. She performed two songs from her first album. Next David talked about the music and film industry and the importance Nashville plays in these areas. Although David’s talked longer than planned, the majority of the attendees enjoyed it. Next year it is going to be hard to top this year’s speaker.

**Achievement Award**

This year’s recipient of the POWID Achievement Award was Jeffery Williams (photo to the right, on left) from Emerson Process Management. Jeff graduated from Ohio Institute of Technology and has worked in the power industry the last 24 years. Over the years, he has worked on various technological control platforms like pneumatic, analog, digital and now neural networks. At Emerson, Jeff was instrumental in developing a new control strategy called SmartProcess. With this new strategy Jeff has been able to help utilities reduce NOx emissions and soot-blowing costs. Jeff has authored many papers and has been a Session Developer at our conferences. In addition, Jeff has authored papers at various POWERGEN and EPRI events. With his award comes a $4,000 dollar academic scholarship for 2005.

*Continued on page 4*
Continued from page 3

him to award to an institution of his choice. The Executive Committee again thanks and congratulates Jeff on his past work and achievements.

Service Award

This year's recipient of the POWID Service Award was Wayne Holland (above, on right). Wayne is not new to this award; this year's award brings his total to three times that he has been awarded for his dedication to our Division. Wayne is a graduate of Auburn University and had worked thirty-one years for Southern Company. Some of Wayne's past and present services have been Paper Reviewer, Session Developer, Honor and Awards Chair, ISA-SP77 Co-Chair, POWID Secretary, and POWID Director. The Executive Committee thanks and congratulates Wayne for his dedication to our Division.

Facilities Award

This year's recipient is Constellation Energy's C.P. Crane Power Plant. More information on this facility will follow in the Fall newsletter after I have visited their facility sometime this summer. I will have more information, including pictures, for the newsletter at that time.

Paper Awards

Best Paper for 2004 was authored by Robert L. Frank entitled “Integrated Approach to Slagging & Fouling Control at TVA's Cumberland Fossil Plant”.

Second Best Paper was authored Joseph Naser, Robert Fink, John O'Hara, Lewis Hanes, Douglas Hill, and Glenn Morris entitled “Nuclear Power Plant Control Room Modernization Planning, Human Factors Engineering & Licensing Guidance.” Third Best Paper was authored by Luc Deprapey and Jean-Baptiste Liters entitled “New Excess Air Controller at Le Havre Power Plant.”

Congratulations and thanks to these authors for their time and effort on their winning papers.

In the next newsletter we will have news on this year's Society awards, which will be awarded at ISA EXPO 2005 in Chicago.

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<th>History of the POWID Achievement Award</th>
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FUTURE ISA/POWID INTERNATIONAL CONFERENCES

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<th>ISA Power Industry Division Symposium</th>
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<tr>
<td>• San Jose, CA</td>
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<tr>
<td>• 4-9 June 2006</td>
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<td>• Pittsburgh, PA</td>
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<td>• June 2007</td>
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<th>ISA EXPO</th>
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<tr>
<td>• Chicago, IL</td>
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<td>• 25-27 October 2005</td>
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<tr>
<td>• Houston, TX</td>
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<td>• 17-19 October 2006</td>
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ISA Power Industry Division
Outstanding Division Award
8th Consecutive Year

ISA–The Instrumentation, Systems, and Automation Society
ISA
67 Alexander Drive, Research Triangle Park, NC 27709 USA
Phone: (919) 549-8411 | Fax: (919) 549-8288 | E-mail: info@isa.org | ISA Online: www.isa.org

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Don Zee Associates
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FMC BioPolymer
W. Walsh
University College Cork

Parliamentarians
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MerTech Inc.
Executive Director
R.C. Rensker, P.E.

10 May 2005

Mr. Gary A. Collee
Applied Control Systems
PO Box 5847
Beaumont, TX 77726-5847

Dear Gary:

Congratulations!

Based on the deliberations of the ISA Honors & Awards Committee and approval of the ISA Executive Board, the Power Industry Division was voted Outstanding Division from the Industries & Sciences Department.

Awards will be presented at the Annual ISA Honors & Awards Banquet on Monday evening, October 24 at the Hyatt Regency Chicago Downtown Hotel, Chicago, Illinois, USA. This outstanding and enjoyable event is our opportunity to provide recognition and express appreciation to the Power Industry Division for its outstanding achievement. I hope you will be able to attend to accept this award on behalf of the Division.

Again, congratulations to you and the Analysis Division on receiving this honor.

Sincerely,

[Signature]

Donald W. Zee
President

DWZ/dwe
cc: Bob Lindeman, I&S Vice President
Enclosure: RSVP
2006 POWER INDUSTRY DIVISION
ACHIEVEMENT AWARD
NOMINATION FORM

This award was created for the purpose of recognizing individuals for their outstanding achievement, original design application, or special contributions toward the development of engineering concepts in the field of instrumentation and controls for the advancement of electric power generation.

Nominee’s name: __________________________________________________________________________________________________

What was nominee’s outstanding achievement, original design or contributions to the power industry?
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Nomination submitted by: __________________________________________________________________________________________

Name, address, and phone number of nominator: ______________________________________________________________________
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Note: Please submit nomination by 1 February 2006
2006 POWER INDUSTRY DIVISION
SERVICE AWARD
NOMINATION FORM

This award is for outstanding service in the field of instrumentation within the Power Industry. The service of the individual is to be noteworthy, exemplary, or unique and exceeds the normal duties of the office or position held. The service is of a nature that advances the stature of the Power Industry Division and/or ISA.

Nominee’s name: __________________________________________________________________________________________________

Contributions to the ISA Power Industry Division or the ISA Society:
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Nomination submitted by: __________________________________________________________________________________________

Name, address, and phone number of nominator: ______________________________________________________________________

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Note: Please submit nomination by 1 February 2006
2006 POWER INDUSTRY DIVISION
FACILITIES AWARD
NOMINATION FORM

Facility name:___________________________________________________________________________________________________

Location:_______________________________________________________________________________________________________

Description of facility:___________________________________________________________________________________________

What is innovative about it? ______________________________________________________________________________________

What was learned? ______________________________________________________________________________________________

What are the benefits to the:

Facility? __________________________________________________________________________________________

Industry? __________________________________________________________________________________________

ISA/Power Industry Division? ________________________________________________________________________________

Examples:

Productivity:_______________________________________________________________________________________

Reliability: _______________________________________________________________________________________ 

Operating flexibility:________________________________________________________________________________

Efficiency:_________________________________________________________________________________________

Availability: _______________________________________________________________________________________

Who to contact at the facility for more information?____________________________________________________________________

Key project dates

Start:_____________________________________________________________________________________________________

Installation: _____________________________________________________________________________________________

Testing period: __________________________________________________________________________________________

In-Service: _____________________________________________________________________________________________

Major contributors:___________________________________________________________________________________________

Other awards received by the facility:___________________________________________________________________________

Additional comments: ________________________________________________________________________________________

__________________________________________________________________________________________________________

__________________________________________________________________________________________________________

Nomination submitted by: _____________________________________________________________________________________

Name, address, and phone number of nominator: ______________________________________________________________________

Note: Please submit nomination by 1 February 2006
2006 ISA POWER INDUSTRY DIVISION

ROBERT N. HUBBY ACADEMIC SCHOLARSHIP
APPLICATION FORM

Postmark Deadline: 16 January 2006
Applications must be received by 19 January 2006
All application materials must be submitted in English

ELIGIBILITY REQUIREMENTS

All Applicants Must:
- Currently be enrolled in an undergraduate program in a Power Industry related field (e.g. Mechanical / Electrical Engineering or Computer Science) at an educational institution in their country of residence.
- Four year degree program applicants must be in their sophomore year or higher of their study or its equivalent
- Applicants must be full-time students in an accredited educational institution and have at least an overall GPA of 3.0 on a 4.0 scale.

Please print legibly using black or blue ink or type.

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<th>PERSONAL INFORMATION</th>
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<td>E-Mail Address</td>
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<th>EDUCATIONAL DATA</th>
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<tr>
<td>Current Enrollment: College or University Name</td>
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<tr>
<td>College or University Address (City / State / Postal Code / Country)</td>
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<tr>
<td>Beginning Year</td>
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<tr>
<td>College / University Undergraduate Major</td>
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<tr>
<th>What type of degree will applicant earn upon graduation? (Please place a check in the appropriate box)</th>
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<td>Associate</td>
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REFERENCE LETTERS

Two letters of recommendation are required. At least one of the letters should be from a faculty member who is familiar with the applicant’s educational program. Faculty recommendations must be on college/university letterhead. The references should comment on the applicant’s character and potential leadership, or for making a significant contribution to the instrumentation, systems, and automation profession in the Power Generation Industry. This can be based on the applicant’s course work, projects, or activities. A confidential recommendation is not required. Each letter of recommendation must be signed by the person making the recommendation and attached to this form by the Submitter.

Note: If the person providing the letter wishes to write a confidential reference, he or she should place the original letter in a sealed envelope and have the Submitter include it with the application.

ADDITIONAL SUPPORTING INFORMATION

Submitter should include the following information in his or her application package:

1. Educational Record, Activities, and Honors
   - Include an official copy of all post high school transcripts with this application that includes all courses attempted and/or completed to date. Degree audit forms and web documents are not acceptable. Be sure all transcripts are legible.
   - List career-related extracurricular activities in which you have participated.
   - List any non-career related activities
   - List academic honors, civic honors, or awards you have received
   - List any professional and honorary society memberships

2. Employment Record / Work Experience
   - List all jobs the applicant has held. Include the name of the employers, the dates of employment, and the type of work you performed.

3. Essay Question
   - The applicant shall describe his or her ambitions and qualifications as an innovator or future leader in a career in the instrumentation, systems, or automation field within the Power Generation Industry. Applicant shall describe his or her career objectives and how the award of the ISA Power Industry Division academic scholarship would help him or her to attain his or her objective. Explain why you want to enter this particular field of engineering or computer science. Comment on what you have achieved and learned through your studies and activities, and what this indicates about your character and determination. Your essay should not exceed 400 words and should be typed and double-spaced.

4. Submitter’s Reason for Submitting this Applicant
   - Submitter shall write a paragraph describing why he is submitting this applicant for this scholarship.

APPLICANT’S CERTIFICATION

Applicant authorizes his or her college/university to make available to ISA information concerning their academic records. The applicant shall understand that falsification of any information disqualifies the applicant from any current or future scholarships. The applicant also understands that all applicants will be evaluated on educational achievement, work experience, and their submitted essay. Submission of an application in no way guarantees that a scholarship will be awarded. Incomplete applications will not be considered.

Name________________________________________Signature________________________________________
Address____________________________________________________________________City______________________State___________
Date_______________ Telephone_____________________________________ Email Address______________________________________

SUBMITTER’S CERTIFICATION

I hereby certify that all information submitted on this application is true and accurate to the best of my knowledge and I currently am a member of ISA and the ISA Power Industry Division.

Name________________________________________Signature________________________________________
Address____________________________________________________________________City______________________State___________
Telephone_________________________ Email Address______________________________________
Date_______________________ ISA Membership Number___________________________
Mailing Instructions

Send three copies (one original and two copies) of the application and required documentation. Each copy should be stapled with attachments in the following order:

- Completed application
- Two Reference Letters
- Transcript (original transcript with raised seal should accompany original application)
- Awards and Honors/Extracurricular Activities
- Employment History
- Essay
- Submitters reason for submitting application

Mail the original and two copies unfolded in an envelope postmarked no later than 16 January to:

Michael J. Skoncey  
ISA POWID - Honor and Awards Coordinator  
First Energy Generation Corp.  
W.H. Sammis Plant  
P.O. Box 176, Route 7  
Stratton, OH 43961  
U.S.A.

APPLICATION MUST BE POSTMARKED BY 16 JANUARY 2006  
AND RECEIVED BY 19 JANUARY 2006 TO BE ELIGIBLE FOR AWARD

Scholarship reviews will begin 20 January 2006. Scholarship recipient will be notified electronically by 30 April 2006. Scholarship recipient will be requested to attend the ISA Power Industry Division’s Annual Symposium Honors and Awards Luncheon to receive his or her award. This Luncheon will be held on 5 June 2006, at the hotel in San Jose, California, during the 16th Annual Joint ISA/EPRI Controls and Instrumentation Conference. It is not a requirement for the scholarship recipient to attend this Luncheon to receive the scholarship. The ISA Power Industry Division will reimburse the scholarship recipient for his or her reasonable travel expenses to this Conference and will provide a complimentary Conference registration. Individuals not being awarded a scholarship will be notified by May 2006.

Do not contact ISA for application status. No application or associated documentation will be returned to applicants. More information about the ISA Power Industry Division can be found at www.isa.org/~powid.

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Thank you to our 2005 Controls and Instrumentation Conference Sponsors!

Don't miss out on the Premier 2006 Controls and Instrumentation Conference, Exhibit, and Sponsorship Opportunity!

16th Annual Joint ISA POWID / EPRI Controls and Instrumentation Conference  
June 4 - 9, 2006  
San Jose, CA

17th Annual - Pittsburgh

For information contact:  
Rodney Jones, ISA, rjones@isa.org  
Robert Webb, Program Chairman, rcw4@ix.netcom.com
The 16th Annual Joint ISA/POWID/EPRI Controls and Instrumentation Conference (49th Annual ISA POWID Symposium) will take place in early June 2006. This conference is the only conference dedicated to the electric power industry control and instrumentation issues. We welcome your proposed paper on a range of control system, instrumentation, data management, I&C technologies, and power industry topics. We will review all submissions and publish accepted papers in the Conference Proceedings via CD.

This conference will include papers selected from the following topical areas, as they are related to automation and control systems, as used in fossil, nuclear, and renewable energy generation. All papers are intended to focus on some aspect of power automation, and with the exception of papers focusing on new ideas and directions, should include actual specific experience that will help attendees understand the potential successes and areas of concern as they apply similar solutions. Papers and presentations should typically describe the facilities involved, what was done, how it succeeded or failed, what changes the authors would suggest in future applications, and how the applications supported and interfaced with engineering, operations, maintenance and other facility organizations and personnel. Authors are encouraged to include discussion on how the systems, equipment, and/or programs enhance safety, security, or reliability, without excessive cost burdens.

If you are interested in developing a four or five paper session in any one of these areas, please contact the Program Chairman, Bob Webb. Contact information is provided on page 28.

Papers will be selected from the following topic areas:

**Power Plant Control Systems**
- Power plant control system retrofit projects
- Boiler control systems
- Turbine control systems
- Emission control systems
- Balance of plant (BOP) control systems
- Control strategies
- Control tuning
- Digital control systems
- Distributed control systems - Fieldbus and other distributed architectures
- Integration of disparate control systems from gas turbine vendors, emission monitors, BOP suppliers... a protocol soup nightmare?
- Control room design
- Advanced control design and implementation
- Optimization systems
- Automation systems
- Process measurements
- Emissions monitoring
- Performance monitoring
- Calibration issues
- Sensor validation techniques
- Configuration control

**Power Plant Safety**
- Burner management and safety systems - ISA-SP84 applicability
- Hazardous material monitoring and control
- Electrical safety in the workplace
- OSHA 1910.279 applicability
- Control of hazardous energy
- NFPA 70E implementation - has anyone done an arc flash calculation recently?
- Other safety regulations and requirements
- Control and information systems security
- Regulatory requirements - NERC 1200, 1300, future

**Advanced Technologies**
- New applications of control theory and signal processing
- Improved simulation and modeling
- Expert systems advances
- Neural networks advances
- Fieldbus network advances
- Wireless networks and technology - cost effective but have the security issues been overcome?
- Computer aided design and engineering
- Data centered design and records management
- Maintenance management and automation integration - after such promises, why has this taken a back seat? Are there any real successes?

**Unique Nuclear Plant Issues and Technologies**
- Share experience on new designs, corrective measures, and guidelines for future nuclear work. What do you do to promote a high level of safety? How do you avoid the cycles between excellence and complacency that we have all experienced? Exchange regulatory experience and discuss control system regulatory issues.
- Setpoints in retrospect - can we avoid excessive costs for unnecessary rework?
- Have digital upgrades become routine - why not? How to make them more cost effective, or is cost effectiveness no longer a big deal?
- ISFSIs - Instrumentation - not an issue?

**Power Industry Issues**
- Deregulation - re-regulation - new experiences in this journey - how is it impacting automation design, operation and maintenance?
Slagging, Fouling, Integration Control, Slag Measurement, Coal Quality

ABSTRACT

TVA has applied several advanced technologies to help mitigate recurring slagging issues at their Cumberland Fossil Plant. The two 1300 MW units have a high heat release and a history of slagging. In order to help operators deal with this on-going issue, TVA has installed technologies including on-line coal analysis, optical furnace exit gas temperature (FEGT) monitors, strain gage-based slag sensors, and CO/O₂ monitors. While most of these are in the initial test phases, the plan is to integrate the information from each into a comprehensive operator tool. The coal analyzer will provide full elemental analysis and calculated ash fusion temperature of coal incoming to the bunkers. Ash fusion temperature in combination with the FEGT determines the potential for slagging. This information compared with the current slagging load as recorded by the slag sensors, current CO/O₂, and process data will determine possible actions to minimize slagging while maintaining unit performance. The long-term goal is to incorporate these systems into an intelligent system to provide real-time guidance to the operators.

INTRODUCTION

The need to burn fuels of varying quality and increased emphasis on availability has driven the need to provide operators with tools to help locate and remove potentially damaging furnace deposits. This paper describes the experience at TVA's Cumberland Fossil Plant with the integration of several advanced systems in an innovative approach at controlling deposit formation. Detecting furnace deposits in large power generation boilers has always been problematic. The current requirements of fuel flexibility, high availability, and reduced staffing worsen the predicament. Fuel flexibility requires furnaces to handle off-design fuels routinely and reduced staffing provides fewer sets of eyes to observe furnace sections. This combination has driven the need for improved instrumentation to aid operators in being aware of potential slagging conditions, locating, and removing deposits before they become large enough to damage the furnace in a slag fall.

Slag deposition on the upper furnace sections, particularly the pendants, in TVA's CUF, two 1300MW opposed wall fired units burning Illinois Basin coal, has been a recurring problem. Both units are rated at 10 million lb/hr (1260 kg/s) main steam flow at 3500 psig (25.2MPa) and 1003°F (539°C) turbine first stage steam conditions. The boiler dimensions are 110 feet (33.8m) wide by 51 feet (15.5m) deep and are configured with 88 burners feed by eleven MPS 89 mills. The furnaces were originally designed with cell burners and were retrofitted with Foster Wheeler CF/CS low NOₓ burners in the late 1990's. The combination of a high heat release ratio and the medium-to-high sulfur and iron content of the fuel result in the troublesome combination of high furnace exit gas temperatures and low ash fusion temperatures. This, in turn, results in ash deposits forming on the first convection pass differential pressure and steam temperature, the novel approach of using strain gage technology to directly measure the increased weight of the deposit holds promise to assist in early detection. These technologies take the approach of identifying the increased potential for deposit formation through coal quality and furnace conditions and detecting early slag deposit.

TECHNOLOGIES SELECTION, DESCRIPTION, AND STATUS

ON-LINE COAL ANALYSIS

Conventional elemental, on-line, coal analysis involved using a Californium source and generally had to be calibrated for each coal type. With the pressure today to burn a variety of coals, this was deemed impractical for feed forward coal slagging potential. A new approach using a neutron generator promised to be free from coal-specific calibration. TVA teamed with Western Kentucky University Applied Physics Institute (WKU) to develop the technology. This analyzer measures on-line, on a minute by minute basis, the sulfur content of coal along with other important coal bulk parameters such as heat content (Btu), moisture, elemental ash etc., that affect the performance of the power plant. The main features of the analyzer, which is based on pulsed fast/thermal neutrons, are self-calibration independent.

Continued on page 14
ent of the coal seam, better accuracy in the determination of elements such as carbon, oxygen and sodium, and reduced radiation hazard during maintenance.

This on-line analysis method uses microsecond-wide 14 MeV neutron pulses produced from a sealed tube neutron generator. The fast 14 MeV neutrons slow down upon interaction with the light elements in coal (primarily hydrogen) resulting in the presence of low energy or thermal neutrons. The 14 MeV neutrons also initiate longer-lived (seconds or longer) activation reactions. The analyzer contains a coal handling system, and several gamma-ray detectors for the measurement of elemental concentrations. These elemental concentrations are derived from the detected gamma rays resulting from the various neutron reactions (fast, thermal, and neutron activation). A laboratory prototype analyzer installed in a 40 ft trailer was operated for three years. The data indicate that C and O can be measured with precision so that the coal calorific value can be established, irrespective of the rank of the coal flowing through the analyzer. A redundant set of self-corrections of the gamma-ray intensities compensates for elemental composition changes due to coal seam changes. Sodium has been measured in real time with a minimum detection limit close to 200 ppm.

At the time of this writing, the analyzer is undergoing calibration and mechanical check out. Initial “course” calibrations have been satisfactory and it appears the analyzer will be able to provide the major elements in the ash acid/base ratio as well as BTU and moisture content. [1]

FEGT MONITOR

Several techniques for FEGT measurement were considered including acoustic, optical, and high temperature thermocouples. The width of the boiler (110 ft, 33.8m) and the presence of wing walls across the boiler make acoustics impractical. High temperature thermocouples are maintenance intensive and are single point measurement devices. Optical methodology was studied and Diamond Power SpectraTemp optical FEGT sensors, shown in figure 1, were chosen and implemented at three locations across the boiler front. This configuration provides a weighted average temperature at three front-to-back paths. Optical technology was picked because it is non-intrusive and required minimal maintenance. In addition to the sensors, automated retracting mechanisms were installed on all three sensors and one automated port cleaning device was installed and is being tested.

The FEGT monitors were installed in late 2003 and have been functioning well. They have already identified side-to-side spatial differences in the furnace exit temperatures and have been helpful in trimming burner secondary air flows. The sensors have also confirmed marginally high exit gas temperatures across the furnace.

STRAIN GAGE SLAG SENSORS

In spite of the cameras and frequent observations by roving operators, some slag deposits formed at the entrance to

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**Figure 1 – Furnace exit gas temperature (FEGT) monitor.**

**Figure 2 – Schematic location of strain gages.**
using the stress strain relation—which each gage output is converted to signals to the multiplexing PLC, from they were removed. In addition to the location of deposits, blowers and the location of “clinkers”. For the effectiveness of individual soot-operators in identifying where deposits were shown schematically in figure 2, measure changes in weight due to slag and ash deposits forming on the pendants. The installation consists of strain gages mounted on the suspension rods for the superheater pendants and an accompanying data acquisition system. The gages, shown schematically in figure 2, measure changes in weight due to slag and ash deposits forming on the pendants. The project has demonstrated that this technology is sensitive enough to measure the weight gain and assist plant operators in identifying where deposits were located. It also provided indication for the effectiveness of individual soot-blowers and the location of “clinkers”. In addition to the location of deposits, the system showed the weight loss when they were removed. The strain gages provide analog signals to the multiplexing PLC, from which each gage output is converted to weight using the stress strain relationship from Hooke’s Law [2]:

\[ S = E \varepsilon \]

Where \( S \) = Stress in pounds per square inch

\( E \) = Modulus of elasticity \( 30 \times 10^6 \text{ lb/in}^2 \) (\( 2.109 \times 10^6 \text{ Kg/cm}^2 \)) for steel

\( \varepsilon \) = strain in micro inches per inch

Using the diameter of the rod a cross sectional area can be calculated and the stress is multiplied by the area of the rod. The weight measurement can be started at any time within the process and any subsequent readings indicate the change in weight from starting conditions. Thus it is not necessary to start from a totally unloaded rod. The special gages used also have a factor that must be applied to the calculation. Since the gages are actually made up of two gages reading in the direction of the strain and two gages reading 90 degrees from the strain a factor of 2.6 is used as a divisor. This is a factor of two for the two gages in line with the stress and a factor of .3 for each of the 90 degree gages for a total of 2.6. The 90 degree gages account for strain in the lateral direction caused by load in the axial plane and is known as Poisson’s Ratio [3].

The sensors were installed in 2003 and have indeed proven the proof of concept. They have provided an early warning of deposit accumulation before other means could. The system is currently being upgraded to an improved operator interface and enhance system reliability.

**CO/O₂ Monitors**

Prior to installation of the other technologies, CUF engineering staff installed an array of combination carbon monoxide and oxygen monitors in the convection back pass. This was done to insure the combustion zone was not in a reducing atmosphere, thereby effectively lowering the ash fusion temperature.

The configuration consists of three sensors in each outlet duct. The sensors have been functioning since installation. One modification was made to re-range the sensors to provide better sensitivity at very low CO levels.

**Integration**

The huge volume of data available from these technologies plus process data from the distributed control system (DCS) cannot be possibly assimilated in real time by one operator. The integration considered for this situation consists of several parts. First, the individual technology data must be reduced into information an operator could use simply and directly from that system. Second, the synergies among these technologies and plant process data must be considered with results and recommendations delivered in a clear manner to the operator.

For example, the elemental coal analyzer, in its basic form, provides the principal coal constituents. The next level of information is using these data to calculate ash fusion temperature and coal heating value. The higher level of integration is using the ash fusion temperature with the current FEGT data, CO/O₂ and process data to determine potential for ash deposition. The next piece of the puzzle is incorporating the strain gage sensor data to determine condition of the convection pass. The last portion of information is looking at the strain data, process information, and the FEGT to determine an optimum feed rate for the ash conditioning additive and a sootblowing schedule to keep the unit at full load and out of slagging trouble while maintaining a good heat rate.

Our plan is to follow an outline similar to the above-described scenario. Initially, advisory data from the FEGT and strain gage slag sensors are being fed to the operators alerting to possible problems. The FEGT system is providing current exit gas temperatures in the north, center, and south sections of the furnace and the strain gages are providing graphic views of deposit buildup in the entrance to the convection pass. At this writing, we are performing acceptance tests on the coal analyzer. When complete, the coal analyzer will provide coal quality information pertinent to

**Continued on page 16**
boiler operations. This may include calculated ash fusion temperature or other coal relationships. As we gain experience with actual furnace performance, these relationships will be formed into a feed-forward advisory system the operator can use to modify operations. This might include increased sootblower operation, starting or increasing fuel additive flow, or changing firing conditions. This initial effort is illustrated in Figure 4.

From the diagram, it becomes clear the operator has many pieces of data to sort through when one considers the diagnostic systems, DCS sensor data, fuel additive control, boiler cameras, as well as the usual number of alarms and operator actions as the normal duty of running a 1300 Mw unit. The longer-term solution is to integrate the related data into a master optimization system. Relieving the operator of the need to watch multiple diagnostic systems as well as make decisions on operating the unit would help ensure the most efficient and reliable result.

The role of the optimization system should include sootblower operations, firing biases, O₂ trim, and fuel additive rate. This is illustrated in Figure 5. Intelligent sootblowing, in two earlier studies, has shown excellent results in extending waterwall tube life while maintain or improving unit performance [4, 5]. Combustion optimization systems are widely used to set combustion biases for NOₓ control and improved efficiency. The system envisioned for Cumberland integrates traditional DCS inputs such as fuel and air control parameters plus on-line coal data, including ash fusion, sulfur content, heating value, moisture content and other complex properties. These will be combined with furnace exit gas temperatures in three zones, slag sensor status, CO and O₂, plus additional furnace data.

The optimizer can provide a number of outputs back to the DCS, sootblower PLC, and fuel additive controls. These outputs will be determined based on the highest priority assigned. For example, if data from the coal analyzer suggest slagging potential is high and FEGT is high on the north side of the furnace, the optimizer may execute waterwall sootblowing on selected wall blowers on the north third of the waterwalls, increase fuel additive flow rate, and monitor strain gage slag sensors for deposit buildup for possible initiation of convection pass sootblowers. As an aid to SCR performance, the system may select an objective function to maintain SCR inlet temperature above 610°F and below 650°F to both maintain high NOₓ reduction and minimize SO₃ conversion. The system can accomplish this through selective sootblowing and biasing firing conditions.

These are just a few examples of how a supervisory optimization system could make use of diagnostic and process data to provide the best combustion conditions and do it on a continuous basis. What steps are necessary to achieve this

Figure 4 – Schematic of an advisory feed forward slagging warning system.

Figure 5 – Schematic of proposed optimization system.
goal? The first is to complete the development and implementation of the online coal analyzer. Second, the slagging and fouling relationships for the coal burned versus this boiler must be tuned. Third, and this caveat goes for any technology-based improvement, the basics must be in place in order to attain the potential of any optimization system. This means the sootblower system is maintained and functioning, the damper drives for burner airflow must be operable, and process data must be accurate.

ACKNOWLEDGEMENTS
The author wishes to acknowledge TVA Program Manager Darrell Howard, TVA Project Manager James Terrell, TVA Cumberland Fossil Plant Manager Leonard “Bud” Hancock and TVA Cumberland Fossil Plant Systems Engineer Ben Zimmerman, who have been instrumental in the implementation and success thus far of this project.

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1. Western Kentucky University Applied Physics Institute website: www.wku.edu/API/research/coal/coa1.htm


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• Competition - less sharing?
• Consolidations - better utilization of resources or just more work for the weary?
• Other new regulations - environmental, personnel management, etc.
• Aging workforce and other demographics
• Flexibility
• Excess capacity
• Mercury emission

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ISA-SP67 COMMITTEE REPORT TO POWID & S&P BOARD
30 June 2005

Submitted by William G. Sotos

ISA67 Committee Status
Chairman W. Sotos

The committee last met on 7 June 2005 in Nashville, TN. The primary focus of this meeting was an ongoing issue with the Nuclear Regulatory Commission regarding the calculation of allowable values that SP67.04 is addressing, SP67.04 activity, the status of SP67.03, subcommittee membership and subcommittee vacancies.

The ISA-SP67 committee membership roster was cleaned-up to remove inactive members from voting status. Three (3) members were removed completely and five (5) were changed to “information” status. Committee balance was considered when making these changes.

The ISA-SP67 committee plans to next meet in San Jose, CA, during the ISA POWID Conference to be held 4-9 June 2006.

Subcommittee Status
ISA-SP67.01 Transducer and Transmitter Installation for Nuclear Safety Applications
Chairman - Vacant

The standard, ISA-67.01-1994, Transducer and Transmitter Installation for Nuclear Safety Applications, No activity is planned at this time.

ISA-SP67.02 Instrument Sensing Line Piping and Tubing Standards for Use in Nuclear Power Plants
Chairman - Vacant

The ANSI/ISA-67.02.01-1999 standard is due for revision or reaffirmation. A small working group will be making a recommendation (by the end of July 2005) to reaffirm as-is or revise the standard. A chairman will be named should a revision be required.

ISA-SP67.03 Reactor Coolant-Pressure-Boundary Leak Detection
Chairman - Vacant

The basic point of interest is Reactor Coolant System (RCS) Leak-Detection. A
Minutes of Meeting
ISA-SP77 Fossil Fuel Power Plant Standards Series

Date: 3 October 2004
Location: ISA’s President’s 2004 Fall Meeting Hilton-Americas-Houston Hotel, Houston, TX
Co-Chairmen: Wayne Holland/Dan Lee

ISA S&P Staff
Loanna Overcash

1. Call to Order
The ISA SP77 Fossil Fuel Power Plant Standards Committee meeting was called to order at 1:20 p.m. CST by SP77 Co-Chair Wayne Holland.

2. Introductions
Asked everyone attending the meeting to introduce themselves and identify their role on the ISA SP77 Committee or with ISA. A special welcome was made to guests Alan Erickson and Alex Lekich.

3. Review and Approval of Agenda
Loanna Overcash requested an item be added to “New Business” to approve a list of new SP77 Voting Members. With Loanna’s New Business item added, SP77 Co-Chair Wayne Holland asked for a motion to approve the agenda as amended. Phil Reeves made the motion to approve the agenda as amended and Bob Hubby seconded. The agenda was approved as written by voice vote.

4. Review and Approval of Minutes
SP77 Co-Chair Wayne Holland asked for a motion to approve the SP77 meeting minutes, Revision 1, dated 29 September 2004, from the previous meeting held in Colorado Springs on 9 June.

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2004, as written. Bob Hubby raised the motion and Goray Mookerjee seconded the motion. Revision 1 of the SP77 Committee minutes from the 9 June 2004 meeting held in Colorado Springs, Colorado, were approved as written by voice vote.

5. SP77 Active Subcommittee Reports

SP77.14.01 - Steam Turbine Controls
Denny Younie

Denny Younie, SP77.14.01 Subcommittee Chair, reported that progress is being made on the draft. There was no updated draft for review prior to the previous meeting held in Colorado Springs on 10 June 2004; there are still outstanding assignments and not a lot of hope for those assignments to be turned in this week. The document has been broken down into the following five sections:

- SP77.14.01-Reheat and Non-Reheat Turbines
- SP77.14.02-Independent Electronic Overspeed Protection
- SP77.14.03-Auxiliary Turbines
- SP77.14.04-Controlled Extraction Turbines

Denny reported that a SP77.14.01 meeting was planned for Tuesday morning, 5 October 2004.

SP77.20.01 - Simulators-Functional Requirements Reaffirmation
Alex Lekich & Allan Zadiraka

Alex Lekich, SP77.20.01 Subcommittee Co-Chair, distributed an update on the work of this committee which last met at the Joint POWID/EPRI Symposium in Colorado Springs on 10 June 2004. Loanna Overcash said the reaffirmation process is in its final stages with ISA Public Review comments due by 30 November 2004. After completing this stage, the Standard will be sent to the S&P Board for a 10-day default ballot and upon completion of these steps, it will be filed with ANSI as a newly accredited standard. If negative ballots are received from the ISA Public Review, these will need to be addressed prior to sending the Standard to the S&P Board.

Alex said a post-reaffirmation revision discussion began at the June 2004 meeting held in Colorado Springs with several sections receiving comments. The Scope and Purpose Statement were also revised/rejected.

The committee roster has been updated by Loanna Overcash and remains open to receiving active members.

The subcommittee will meet on 3 October 2004, immediately following the SP77 meeting, and will concentrate on a continuation of section revision discussions.

Alex Lekich announced that a simulator session will be conducted at the 2005 Joint POWID/EPRI Conference in Nashville; hopefully, this will renew interest in the document and recruit new Members to help in the post reaffirmation revision of the standard.

SP77.40 - WG1 Functional Diagram Usage
Dan Lee

Dan Lee, SP77.40.01 WG1 Subcommittee Chair, reported that the SP77.40 WG1 committee held a meeting on 10 June 2004, after the ISA POWID/EPRI 2004 Conference in Colorado Springs. The next committee meeting will be held at the ISA President’s Fall Meeting in Houston on Wednesday, 6 October 2004.

SP77.41.01 - Boiler Combustion Controls Standard Reaffirmation
Gordon McFarland

Gordon McFarland, SP77.41.01 Subcommittee Chair, reported that the ballot for ISA-77.41.01, Fossil Fuel Power Plant Boiler Combustion Control, was been sent out; Loanna Overcash distributed a hardcopy of the ballot to those present. A meeting is scheduled on 6 October 2004.

SP77.44 - Steam Temperature
Dan Lee, SP77.44 Subcommittee Chair, had nothing new to report as the SP77.44 Subcommittee is between revision cycles.

Note: SP77.44.01 (Steam Temperature Control for Drum Type Boilers) is up for reaffirmation in 2005. This committee will start its reaffirmation process in early 2005, perhaps during the first series of SP77 meetings held in 2005.

SP77.70 - Instrument Piping Standards
Goray Mookerjee

Goray Mookerjee, SP77.70.01 Subcommittee Chair, reported that a meeting was held in Colorado Springs, on 10 June 2004, in which the author group drafted a reply to Dr. Leo Altcheh’s comments (Dr. Altcheh had submitted a negative ballot when his initial comments went unaddressed). The reply was sent and Dr. Altcheh has since changed his negative vote to a positive. Some of the comments Dr. Altcheh made will be addressed in the post reaffirmation meetings on this standard.

Loanna Overcash reported that there are some outstanding comments from the Public Review level of the reaffirmation process which will be discussed at the meeting scheduled for Wednesday, 6 November 2004.

SP77.82.01 - SCR Instrumentation and Controls Standard
Cyrus Taft

Cyrus Taft, SP77.82.01 Subcommittee Chair, was not present at the time of this report (but did come in later in the meeting). It was reported that a meeting was held at the Joint ISA/EPRI Conference in Colorado Springs on 10 June 2004. The group is making slow progress as four or five writing assignments are still outstanding. A meeting is scheduled on Wednesday, 6 October 2004.
6. Director’s Report
Wayne Holland, S&P Board Managing Director and Co-Chairman of SP77, reported that he attended the ISA S&P Board Meeting on 3 October 2004. Wayne reported that Ian Verhappen will become the new S&P Board Vice President, replacing Vic Maggioli. Wayne also said that Bob Webb, along with Eric Byres and Bryan Singer, were recognized for their contributions and leadership during 2004 developing ISA-TR99, a Standard on Cyber-Security issues. Bob, Eric, and Bryan received plaques at a S&P Honors & Awards Luncheon held after the S&P Board Meeting.

Wayne Holland announced the good news that Eliana Beattie, former SP77 Committee staff supporter, has returned to the ISA Standards Department.

Wayne Holland reviewed the intentions of Leo Staples’ visit to the SP77 meeting on 9 June 2004, at the Joint ISA POWID/EPRI Conference held in Colorado Springs. Leo is working on a standard for his company that will focus on instrument calibration for Fossil Fuel Power Plants. Leo believes this could be the start of an ISA standard for SP77 and will make a draft available for the committee to review when it becomes available. The SP77 committee can decide at that time if it should be pursued further. Wayne said this would be a topic that would be appropriate for a new standard within SP77 if the procedures addressed specific power plant applications, and that the SP77 committee was always looking for potential new standards topics. It was agreed that if nothing comes from Leo’s endeavor, then it might be something for the SP77 committee to pursue independently, perhaps with someone from Leo’s work group leading the effort.

Action Item: If anyone knows of any existing standards on this subject, please report back to Wayne Holland and Loanna Overcash.

7. Liaison Reports

SP5.1 Instrument Symbols and Identification Liaison Report
Dan Lee
Dan Lee, the SP77 liaison to the ISA SP5.1 Subcommittee, reported the ISA SP5.1 Subcommittee has not met in over three years and is not planning to meet during the ISA EXPO 2004 in Houston. Per Charlie Robinson (ISA S&P Staff), Draft 5 of SP5.1 is to be issued for SP5.1 committee ballot in mid-October.

NFPA 85 Liaison Report
Dan Lee
Dan Lee reported the Publication for NFPA 85 2004 Revision has been published and is available for purchase. The NFPA 85 committee is scheduled to meet 27-28 October 2004, to start the 2007 revision cycle. Public comments to NFPA 85 are open and will remain open until 27 May 2005. No other information has been distributed.

IEC TC65 WG9 Liaison Report
Dan Lee
Dan Lee reported the IEC TC65 WG9 Committee has not been active in completing their proposed report (Unit Load Control and Fuel/Air Control). As member of USNC Expert to IEC/TC 65, Dan said he has not received any additional IEC documents to be reviewed or balloted on.

IEEE
Cyrus Taft
Cyrus did not submit a report.

ASME
Wayne Holland
Wayne did not submit a report.

TR84.00.05 - Guideline on the Implementation of ANSI/ISA-84.00.01
Wayne reported this is a new Technical Report authors’ group under the ISA SP84 Committee. The ISA SP84 Committee creates standards for programmable electronic systems for use in safety applications. The purpose of this technical report is to show that a Burner Management System (BMS) is a Safety Instrumented System (SIS). Additionally, the Technical Report will demonstrate how ANSI/ISA-84.00.01-2004 (IEC 61511) can be used quite effectively with prescriptive standards such as NFPA 85, API 14C and API RP 556. The ISA-84.00.01-2004 Standard concerns “Functional Safety-Safety Instrumented Systems for the Process Industry Sector”.

David Roney discussed the current status of this committee. There was a meeting held in Long Beach during the ISA 2004 PSM. The working group that is developing this technical report met in Houston during the ISA 2004 PFM and several teleconferences were held between these two meetings during 2004.

A first draft of the Technical Report has been produced and is under review by the working group members.

Allan Zadiraka agreed to be the SP77 liaison to this committee. Wayne Holland said that the minutes of the S&P Board meeting held on 3 October 2004, during the ISA 2004 PFM in Houston, would include a status report for the ISA-SP84 Committee.

ISA-SP99
David Wade
Wayne Holland had asked Bob Webb to give a progress report on this committee but Bob was unable to attend the SP77 meeting.

8. Old Business

A. Network/Control Systems Security Issues
No report since Bob Webb and David Wade were not present.

B. Merger of SP77.40 Series Standards
Bob Hubby reported that he has not been able to get back to this project, but that the merged test document that he put together has been very useful on using/finding definitions for the SP77.42.02 Drum Level Measurement Technical Report draft. No comments have been received from anyone about whether or not to merge these documents.

C. Proposed New Standard on Instrument Calibration
See earlier discussion under Director’s Report on Leo Staples. If anyone is interested in volunteering for this standard, please contact Wayne Holland.

D. ISA-TR84.00.05 Standard to Address Industrial Boiler Safety
Allan Zadiraka will be liaison to this committee and David Roney is also a member of this Technical Report author’s group.

9. New Business

A. SP77 Voting and New Members
Loanna Overcash read a list of requests to add the following voting members to these committees:

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SP77 - Voting: Bob Eng and Phil Reeves

SP77.14 - Voting: Gary Cohee, Danny Crow, Bob Hubby, Goray Mookerjee, Phil Reeves, Mike Skoncey, Cyrus Taft

SP77.20 - Voting: Kevin Smith

SP77.42 - Voting: Gary Cohee

SP77.82 - Voting: Mark Buzanowski

Note: Danny Crow will be made a voting member on all subcommittees on which he is a member.

Cyrus Taft made the motion, Bob Hubby seconded, and all approved by voice vote the addition of the above voting members to the corresponding rosters.

B. Issue of Public Review (agenda item added during the New Business discussion)

A concern was expressed by Goray Mookerjee that ISA standards documents are not being advertised enough for the Public Review cycle. Goray Mookerjee will send a letter of recommendation to Wayne Holland concerning this issue.

10. Next Meeting


11. Adjournment

SP77 Co-Chair Wayne Holland asked for a motion to adjourn the meeting. Bob Hubby raised the motion and Cyrus Taft seconded, and the motion was approved by those present. The meeting was adjourned at 3:15 p.m. CDT.

Minutes of Meeting
SP77 Fossil Fuel Power Plant Standards Series

Date: 23 February 2005
Location: ISA Headquarters, Research Triangle Park, NC
Chairmen: Dan Lee

Attendees
Allan Zadiraka  Gary Cohee
Goray Mookerjee  Don Christopher
Dan Lee  Denny Younie
Alex Lekich  Jim Olson
Mike Skoncey  Bob Hubby
Cyrus Taft

ISA Staff: Loanna Overcash

1. Call to Order

The meeting was called to order at 8:12 a.m.

2. Introduction of Attendees

Those present introduced themselves and signed the attendance list. The SP77 Committee roster was distributed for Members to update.

3. Review and Approval of Agenda

Dan Lee noted that Phil Reeves’ name was listed incorrectly on page 3 under Old Business, Item c). With no other changes, Dan asked for a motion to approve the agenda as amended. Bob Hubby made a motion, Denny Younie seconded, and via voice vote the previous minutes were approved.

4. Review and Approval of Minutes

The SP77 Committee meeting minutes from the 3 October 2004 meeting in Houston were distributed for approval. With no changes to the minutes, Denny Younie made the motion to approve the minutes as written. Bob Hubby seconded and via voice vote the previous minutes were approved.

5. SP77 Active Subcommittee Reports

SP77.11 - Turbine Water Induction
This subcommittee is inactive and no document has been published. The SP number will be held for future use.

SP77.12 - Turbine Supervisory Instrumentation
This subcommittee is inactive and no document has been published. The SP number will be held for future use.

SP77.13 - Turbine Steam Bypass Systems
This standard needs to be reaffirmed. The subcommittee roster is out-of-date. Depending upon the response for Subcommittee participation, the SP77 committee may consider advertising on the POWID list-serve and Intech to solicit participation on this committee.

Action: Loanna Overcash will issue ISA-77.13.01-1999 to the committee for reaffirmation and confirm SP77.13 membership of those on roster and copy the SP77 committee to see who wants to join.

Action: Wayne Holland/Dan Lee will solicit a new subcommittee chair.

SP77.14.01 - Steam Turbine Controls
This subcommittee is active and is working on completing a new standard. Denny Younie (Chair) reported that the subcommittee conducted a meeting in Houston and made some progress in the standards draft. Bob Hubby helped create Draft 6 which will be reviewed later.

For the Nashville meeting, Denny would like to incorporate material provided by Jim Olson and fill in any outstanding assignments to facilitate the completion of this document. It may be possible to submit this standard for SP77 committee approval later this year.

SP77.20 - Fossil Simulation Functional Requirements
This subcommittee is active and is working on reaffirming an existing standard. Alex Lekich (Co-Chair) reported that the existing standards reaffirmation process was open for Public Review until 30 November. With no public comments, the standard was sent to S&P Board approval which was completed on 11 February 2005. The next step is to achieve ANSI filing.

The subcommittee last met in Houston (October 2004) and concentrated on par-
Participants’ comments of the future revision. The subcommittee will meet later this morning (23 February 2005) to review the document outline and future assignments.

**Action:** Loanna Overcash will verify ANSI filing is submitted and report on standard publication status.

SP77.31 - Boiler Implosion Protection
This subcommittee was never active and no Scope and Purpose was approved. The SP number will be held for future use.

SP77.40.01 - (WG1) Functional Symbol Diagramming
This subcommittee is active and is working on creating a new standard. Dan Lee (Chair) reported the SP77.40 working group's last meeting was held on 6 October during the ISA EXPO 2004 in Houston, Texas. The meeting minutes have been submitted to the committee Web site. The changes from the 6 October meeting were to be incorporated into Draft 8 for submittal to the committee Web site. However, Draft 8 is not completed and has not been distributed. The next SP77.40 committee meeting has not been scheduled, although an informal group is expected to work on this report later.

SP77.41.01 - Boiler Combustion Controls
This subcommittee is active and is working to affirm the revised standard. Gordon McFarland (Chair) did not submit a report. Loanna reported that the voting process is still ongoing for ISA-77.41.01 since not enough SP77 committee ballots were returned.

**Action:** Loanna Overcash will follow-up individually with voting members who have not returned a ballot.

**Action:** Gordon McFarland to confirm SP77 committee approval of ISA-77.41.01. If this standard is approved by SP77 committee then, ISA-77.44.01 standard will be distributed for ISA Public Review. If this standard receives any negative votes the SP77.41.01 committee will resolve the negative ballot during the Nashville meetings.

SP77.42.01 - Feedwater Control
This standard needs to be reaffirmed.

**Action:** Loanna Overcash to issue ISA-77.42.01 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

SP77.42.02 - Feedwater Controls - Drum Level Measurement
This subcommittee is active and is working on creating a new technical report. Randy McSpadden (Chair) was not present and no report was given. Gary Cohee reported that during the Houston meeting in October 2004, there were questions on some of the calculations.

**Action:** Wayne Holland/Dan Lee to solicit Randy McSpadden to hold a subcommittee meeting in Nashville.

SP77.43 - Unit Plant Demand Development
This subcommittee is active and the standard was reaffirmed in 2002. As this standard is between revision cycles, Cyrus Taft (Chair) did not submit a report.

SP77.44.01 - Steam Temperature Control for Drum Type Boilers
This standards needs to be reaffirmed. Daniel Lee (Chair) will start the reaffirmation process at the Nashville meeting. Depending on the response for Subcommittee participation, the SP77 committee may consider advertising on the POWID list-serve and InTech to solicit participation on this committee.

**Action:** Loanna Overcash will confirm SP77.60 membership of those on roster and copy the SP77 committee to see who wants to join.

**Action:** Loanna Overcash will issue ISA-RP77.60.02 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Bob Hubby will report on SP77 reaffirmation ballots at the next SP77 committee meeting in Nashville.

**Action:** Loanna Overcash will confirm SP77.44.01 membership of those on roster and copy the SP77 committee to see who wants to join.

**Action:** Loanna Overcash will issue ISA-77.44.01 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Daniel Lee will report on SP77 reaffirmation ballots at the next SP77 committee meeting in Nashville.

SP77.44.01 - Steam Temperature Control for Once-Through Boilers
This subcommittee is active and the standard was reaffirmed in 2001. As this standard is between revision cycles, Daniel Lee (Chair) did not submit a report.

SP77.61 - Control Panel Layout and Design
This subcommittee is inactive and the standard draft was withdrawn before the draft was completed. Since this standard will not be published, the SP number will be held for future use.

SP77.60.02 - Alarms
This standards needs to be reaffirmed. Robert Hubby (Chair) will start the reaffirmation process at the Nashville meeting. Depending on the response for Subcommittee participation, the SP77 committee may consider advertising on the POWID list-serve and InTech to solicit participation on this committee.

**Action:** Loanna Overcash will confirm SP77.60 membership of those on roster and copy the SP77 committee to see who wants to join.

**Action:** Loanna Overcash will issue ISA-77.60.01 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Bob Hubby will report on SP77 reaffirmation ballots at the next SP77 committee meeting in Nashville.

**Action:** Loanna Overcash will issue ISA-77.60.02 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Bob Hubby will report on SP77 reaffirmation ballots at the next SP77 committee meeting in Nashville.

**Action:** Loanna Overcash will issue ISA-77.60.02 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Loanna Overcash will issue ISA-77.60.03 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Loanna Overcash will issue ISA-77.60.04 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Loanna Overcash will issue ISA-77.60.05 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

SP77.70 - Instrument Piping Installation
This subcommittee is active and the standard was reaffirmed in 2004. As this standard is between revision cycles, Bob Hubby (Chair) did not submit a report.

**Action:** Loanna Overcash will issue ISA-77.70.01 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Loanna Overcash will issue ISA-77.70.02 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

**Action:** Loanna Overcash will issue ISA-77.70.03 to the SP77 committee for reaffirmation. Closing date for this reaffirmation will be before the June POWID conference.

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The following is a summary of the active SP77 subcommittees:

<table>
<thead>
<tr>
<th>Committee</th>
<th>Published Date</th>
<th>Status</th>
<th>Chair Person</th>
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<tr>
<td>SP77.13</td>
<td>1999</td>
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<td>SP77.20</td>
<td>1993</td>
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<td>A. Lekich, A. Zadiraka</td>
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<td>SP77.41.01</td>
<td>1992</td>
<td>In Reaffirmation</td>
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<td>CEMS Compendium of Definitions</td>
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<td>Denny Younie</td>
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<tr>
<td>SP77.81.05</td>
<td>Standard Software Interface for CEMS Relative Accuracy Test Audit Data</td>
<td>Draft</td>
<td>Denny Younie</td>
</tr>
</tbody>
</table>

6. S&P Board Activities

There were no new S&P Board activities to report. See the SP77 October 2004 minutes for a copy of the S&P Board minutes from October 2004. The S&P Board will meet in conjunction with the ISA President's Spring Meeting which will be held in Portland, Oregon on Saturday, 30 April through Wednesday, 4 May 2005.

7. Liaison Reports

ISA SP5.1 Instrument Symbols and Identification Liaison Report - Dan Lee reported the release of ISA-5.1 (Instrumentation Symbols and Identification) Draft 5 for committee review and for public comments on 15 October. This parallel review for comments had a closing date of 29 November for public comments and 14 December for committee ballot. Dan Lee reviewed Draft 5 and issued a negative ballot with corresponding comments. Dan’s comments were distributed to various SP77 members to inform peers of his review and to solicit additional comments and ballots as public ballots. No additional comments or ballots were submitted.

IEC TC65 Liaison Report - Dan Lee reported that the IEC TC65 WG9 committee has not been active in completing their proposed report (Unit Load Control and Fuel/Air Control).

As a member of USNC Expert to IEC/TC 65, Dan recently received three documents for balloting. Dan did not review these documents and had no liaison report to submit on these documents. The three documents are:

- TC 65/349 “IEC 61499-4 Function Block, Part 4 Rules for Compliance Profiles”
- TC 65/353 “Control Technology - Rules for the Designation of Measuring Instruments”

The IEC next meeting is in Ottawa, CA with various committees meeting schedule from 27 April to 6 May 2005. The TC65/WG9 is not schedule to meet.
NFPA 85 Liaison Report - Dan reported that the NFPA 85 committee met in Quincy, MA on 27-28 October to start the next revision cycle. The committee reviewed many committee proposals, task group reports, and identified outstanding issues to be addressed by individual committee members for submittal as committee proposals. The public can submit comments to NFPA 85 until 27 May 2005. NFPA 85's next meeting will be scheduled late June or early July to address all committee and public proposals.


ASME Liaison Report - Wayne Holland submitted no report.


ISA-TR84.00.05 Liaison Report - Allan Zadiraka/David Roney - Allan reported that Dave and he attended a portion of the TR84.00.05 meeting in Houston (October 2004). No activity has been reported since then, although this committee may meet at the ISA PSM meeting. Dan Lee reported that, if possible, he will attend their meeting.

8. Old Business

a. SP77 Standards Consolidation - The committee discussed the topic and decided to consolidate the Steam Temperature Standards in 2005. The consolidation of other SP77 standards will be reviewed again when benefits are defined.

Action: Loanna Overcash to provide a report on the sales history of the SP77.40 series standards.

Action: Loanna Overcash to provide an analysis of the costs associated with the reaffirmation process vs. the cost/benefits of consolidating multiple standards.

Action: Loanna Overcash to pursue with Standards management the possibility of selling the SP77.40 series standards as a bulk product. Action: Daniel Lee to undertake the consolidation of the steam temperature standards in Nashville during reaffirmation.

b. New Standard for Fossil Power Plant Instrumentation Calibration Procedures - No correspondence has occurred since the topic was introduced in Colorado Springs.

Action: Wayne Holland/Dan Lee will follow-up on this topic for next meeting.

c. SP99 liaison position - No report given.

Action: Phil Reeves will follow-up with David Wade on co-chairing this role and provide a report at the next SP77 committee meeting in Nashville.

9 New Businesses

Action Item: Loanna Overcash will ask the Graphics department to reduce the ISA logo size that appears on the minute’s template in an effort to reduce the overall file size.

10. Next Meeting

The next SP77 committee meeting will be held during the POWID conference in Nashville, 8 June.

11. Adjournment

Cyrus Taft made the motion to adjourn SP77 committee meeting. Mike Skoncey seconded and via voice vote the SP77 committee meeting was adjourned at 9:55 a.m.

The 137th meeting of the ISA POWID Executive Committee was held on 22 February 2005 at the ISA Headquarters in Research Triangle Park, NC.

MEETING CALLED TO ORDER

Gary Cohee, ISA Power Industry Division Director, called the meeting to order at 1:20 p.m. EST.

INTRODUCTION OF MEMBERS AND GUESTS

Daniel Lee, POWID Secretary and Director-Elect, circulated a meeting attendance list/POWID update roster. Director Gary Cohee requested that the attendees update the POWID roster information showing active ISA position.

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APPROVAL OF THE PREVIOUS MINUTES

Bob Hubby moved that Revision 1a of the minutes for the Power Industry Division Executive Committee meeting held on Monday, 4 October 2004, at the ISA EXPO 2004 at Hilton Americas Hotel, Houston TX be accepted as written and Don Christopher seconded the motion. The minutes of the Power Industry Division Executive Committee meeting held on Monday, 4 October 2004 were approved as written by voice vote of the POWID Executive Committee members present.

AGENDA ADDITIONS AND/OR CORRECTIONS

Bob Hubby moved to accept the agenda, distributed before the start of this meeting, and Dennis Younie seconded the motion. The agenda was approved with no changes by voice vote of the POWID Executive Committee members present.

DIRECTOR STAFF REPORTS

a) Division Report

Gary Cohee reported that the 2006 POWID Business Plan and 2006 Budget had not been started. Gary asked the EXCOM members present if any new topic should be addressed in the Business Plan. Mike Skoncey proposed an honorarium to support travel expenses for retired EXCOM members’ attendance to support POWID. Gary will explore this topic when the 2006 budget is prepared.

Gary asked the Executive Committee if there were any corrections to the 2004 POWID Annual Report previously submitted for review. With no comments, Gary asked for a motion to approve the 2004 Annual Report. Bob Hubby made a motion to approve the 2004 POWID Annual Report. Roger Hull seconded the motion and via voice ballot the Executive Committee passed the motion.

b) Financial Report

Gary Cohee distributed to the Executive Committee the 2004 annual budget report showing the activities statement as of 31 December 2004. Gary summarized the POWID 2004 year-end financial results and the 2004 POWID Symposium financial results. Gary reported that ISA reports expenses according to the specific year. Gary asked if there were any comments on the 2004 budget that should be incorporated into the final report. No comments were submitted.

Roger Hull, POWID’s Treasurer was in attendance reported that the POWID Division fund balance, as of the end of the fourth quarter, 31 December 2004, is $26,394. Roger reported the ISA Division Scholarship Endowment Fund balance sheet shows a balance of $127,059 for POWID as of 30 September 2004 with $20,000 added during the first three quarters of 2004. The POWID Division has approved an additional $10,000.00 to
the endowment fund which should be included in the year end endowment statement.

Note: Subsequent to the Executive Committee meeting, Ken Hilgers reported that the POWID Endowment fund balance as of 31 December 2004 was $145,415.00 (Principle Balance = $140,896.00 and Earning net of awards = $4,519.00)

Joining the POWID meeting was Ken Hilgers (ISA Director of Finance and Administration) to answer financial questions posed by members of the POWID committee. The following are the questions and Ken’s responses:

1. POWID Question: Can cost for POWID Symposium be recorded by event and not by calendar year? Symposium cost may be expended over a 2-3 year period and POWID would like to record this cost for each individual Symposium.

Ken’s Responses: Presently, cost is accounted per calendar year and not accounted per conference. This current accounting practice does not allow for verification of expenses per conference.

Action: Ken Hilgers will review current symposium accounting practices and will provide a response based on his findings.

2. POWID Question: POWID sent our recommended budget to ISA but, after ISA modifies and approves the POWID budget the approved budget, it was not sent back to POWID.

Ken’s Response: Communication breakdown occurs when the ISA reviews the budget; the modified budget is sent to the VP but not to the Division. The Division budget is modified as indirect Overhead is adjusted every year by the Board, and other changes are often dictated by ISA management. It was acknowledged that the budget review process needs to include POWID in the discussion.

Action: Gary Cohee will follow-up with I&S Division leaders on budget review process.

3. POWID Question: Why isn’t symposium income not included in the Division budget?

Ken’s Response: The Division budget and Membership budget are different budgets within ISA accounting. The Division Symposium’s expenses are included in the Membership budget item, but any profits are reported in the Division reserve. Spending the reserve should be permitted, but a method will need to show a year deficit knowing that at year-end the Conference budget will be included in the reserve. A new task force is exploring the budget process to allow the Division to use the reserves. Leo Staples has listed this topic as an information item in the upcoming President Meeting based on an action item from last fall meeting in Houston.

Action: Gary Cohee will follow-up with I&S Division leaders on budget review process.

4. POWID Question: To complete the 2004 POWID Symposium report, Dennie Younie requested the Division YTD financial statement. It was determined that the third quarter statement would provide the most accurate financial results

Ken’s Response: Will obtain a third quarter financial statement and forward it to Rodney Jones.

Action: Ken Hilgers will obtain a third quarter financial statement and submit it to Rodney Jones.

Action: Gary Cohee asked Rodney Jones to verify access right to the division financial record for POWID members Gary Cohee, Dan Lee, and Roger Hull and to verify access right to the membership records for POWID members Gary Cohee, Dan Lee, and Dan Crow.

c) Long Range Planning

Ron Hicks, POWID’s Long Range Planning Committee (LRPC) Chairperson, reported on POWID LRPC meeting held earlier. Ron submitted LRPC Meeting minutes. The following items were discussed at the LRPC meeting held earlier and were brought before the POWID Executive Committee.

1. POWID’s LRPC proposed to the Executive Committee that the ISA NOx Conference name remain as a conference to be run after the POWID Symposium. After committee discussion, Bob Hubby made the motion and Roger Hull seconded the motion. By voice vote the Executive Committee approved the LRPC proposal.

2. Scientech’s NUS Instruments Users Group Meeting was discussed as to its schedule and format in conjunction with the 2006 POWID Symposium. The LRPC consensus was to allow the 2006 General Chair to develop a Memorandum of Understanding for the 2006 Symposium. No action by the POWID Executive Committee is required at this time.

3. Conference Marketing strategy for the Nashville conference was presented by Jill Liles (ISA Development and Marketing Administrator) and Sherrie Gorji (ISA Marketing and Education Service Coordinator). Their presentation included a 2-color print scheme with a concise message and a proposed schedule for a preliminary and a final program. To reduce cost, effort will be to broadly distribute the preliminary program and the final program will simply include an extra sheet within the preliminary program. The POWID Executive Committee discussed several issues on the marketing strategy, but agreed that the proposed marketing strategy is acceptable. Cyrus Taft raised the issue of an accurate mailing database. No action by the Executive Committee is required at this time.

4. ISA’s New Venture Initiatives is seen as an opportunity for POWID

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to address declining membership. Ron Hicks will facilitate a conference call with Dale Evely, Bob Hubby, and Danny Crow to “brainstorm” on possible programs.

**Action:** Ron Hicks will submit proposal summary to Gary Cohee and Dan Lee on or before 1 April 2005 in preparation for the Presidents Winter meeting.

5. Nominating - Wayne Holland reported that Stanley Marlin has formally resigned from the EXCOM committee.

Gary Cohee confirmed that the POWID membership roster is currently 32 members. The ISA POWID MOP (Manual of Procedures) states that the membership should consist of 32 members, of which (as of 1 January 2005) 10 are vendors, 8 are A/Es, and 14 are utility members. With Marlin’s departure there is one position open on the POWID Executive Committee. Gary Cohee made a motion to nominate Goray Mookerjee and Bob Hubby seconded. After some discussion by Executive Committee members, the executive committee approved Gary’s nomination by voice vote.

**Action:** Dan Lee to remove Marlin Stanley and add Goray Mookerjee of DETCo to the POWID Executive Committee roster.

d) **POWID Organization Structure Review Committee** - The POWID Organizational Structure Review Sub-Committee Chairman Gordon McFarland was not in attendance. Dan Lee reported on the balloting status of the Revised MOP consisted of 14 approvals with a few negative votes on selected sections regarding organization roles. Since the intent was to obtain a majority vote, Dan was going to solicit EXCOM members to submit their ballots ASAP. Negative votes will be retained for discussion on the next MOP review cycle.

**Action:** Dan Lee to solicit Executive Committee members for ballots to obtain a simple majority.

**STANDARDS COMMITTEE REPORTS**

a) **SP67 Nuclear Power Plant Standards Committee** - Bill Sotos, Chairman

Bill Sotos was not present at the POWID EXCOM meeting and did not submit a written report.

b) **SP77 Fossil Fuel Power Plant Standards Committee** - Daniel Lee, Vice-Chair

Dan Lee was present and reported on the status of SP77. The SP77 Standards Committee last met during ISA EXPO 2004 in Houston TX on 2 October 2004. The major activities in the minutes include:

- Status of the SP77 active Sub-Committees.
- Report for S&P Board meeting
- Liaison reports
- Approval of Allan Zadiraka as liaison to ISA SP84 Working Group #3 (SIS for Burner Management)
- Approval of voting members on various sub-committees

Dan reported that the SP77 committee is scheduled to meet on 23 February with various sub-committee meetings to be held afterwards. A major topic to be addressed is the consolidation of multiple SP77 standards as several standards are up for reaffirmation. The committees scheduled to meet include:

- SP77.0
- SP77.20/.21
- SP77.40.01
- SP77.14.01
- SP77.70.01
- SP77.82.01

**MEMBERSHIP SERVICE COMMITTEE REPORT**

a) **Honors & Awards - Michael Skoncey, Chairperson**

Michael Skoncey reported on the following activities:

1) Mike reported that Gordon McFarland was being nominated for the 2005 S&P Award and Cyrus Taft was being nominated for the 2005 EG Bailey Award. Also, Mike solicited Executive Committee members to prepare a letter of recommendation for Don Labbe to be nominated for the ISA Fellow Award.

2) For the 2005 POWID Achievement Award, Mike reported that he received one nomination naming Jeff Williams (Emerson Process Management) as a candidate. After some discussion on the candidate’s achievements, Bob Hubby made a motion to accept Jeff as the 2005 POWID Achievement Award. Goray Mookerjee seconded the motion and via voice ballot the Executive Committee passed the motion.

3) For the 2005 POWID Service Award, Mike reported that he received two nominations naming Jeff Williams (Emerson Process Management) and Wayne Holland (Retired) as candidates. After some discussion on each candidate’s contributions, Bob Hubby made a motion to award the 2005 POWID Service Award to Wayne Holland. Goray Mookerjee seconded the motion and via voice ballot the executive committee passed the motion.

4) For the 2005 POWID Facilities Award, Mike reported that he received one nomination naming Constellation Energy, C.P. Crane Power Plant. After some discussion on the nomination, Bob Hubby made a motion to award the 2005 POWID Facilities Award
to Constellation Energy. Roger Hull seconded the motion and via voice ballot the motion was passed.

5) For the 2004 Best Paper Award, Mike distributed five papers to the Executive Committee member asking each member to rate the papers for the Best Paper Awards. Executive Committee members were requested to submit their paper ratings to Mike by mid-March.

Action: Executive Committee to submit their paper rating for the Best Paper Award to Mike Skoncey by mid-March.

6) Mike reported that Ron Hick’s Achievement award was awarded to two students at Michigan State. Jim Batug’s and Don Christopher’s Achievement awards are still outstanding. Don Christopher requested that his Achievement award funds be submitted to an Electrical Engineering Department endowment fund. Mike requested Rodney Jones to verify if ISA will permit this fund transfer.

Ron Hicks’ award was drawn from the Division reserve.

Jim Batug’s award will be drawn from the Division reserve.

Don Christopher’s award will be drawn from the endowment fund.

Action: Ron Hicks is to send bio information on the two students receiving the Achievement Award to Mike Skoncey.

Action: Rodney Jones will verify if ISA will transfer Don Christopher’s Achievement award funds to a college endowment fund.

7) Mike reported that there were no applications for the 2005 Bob Hubby Scholarship. It was noted that the lack of applications was probably due to the lack of marketing and short time period for submittal.

b) Membership - Danny Crow, POWID Chairperson
Danny was not in attendance at the POWID Executive Committee meeting held in Houston, and did not submit a report.

Gary Cohee has received instructions and access rights to obtain the Power Division Membership database. The issue of obtaining adds and drops report was discussed.

Action: Rodney Jones will determine if and how ISA can provide membership “adds and drops” reports.

c) Historian - Don Christopher
Don reported that he has not received any of the past POWID information from past Historian Bob Web. Bob Web later informed Don that the boxes of information will be shipped within 48 hours.

Action: Bob Webb to ship past POWID material to current Historian Don Christopher.

d) Professional Development - Tom Stevenson
Tom was not in attendance at the POWID ExCom meeting, and did not submit a report.

e) Section/Division Liaison - Bob Hubby
Bob was in attendance at the ISA POWID Executive Committee meeting, but had nothing new to report and submitted no report.

COMMUNICATION COMMITTEE REPORT

a) Newsletter - Dan Antonellis, Newsletter Editor
Dan was not present, but did submit a report. Dan Lee reported that the Spring 2005 Newsletter, our only hardcopy newsletter of the year, is intended to feature the upcoming POWID/EPRI Conference.

b) Publicity - Joe Vavrek
Joe was not in attendance, and did not submit a report.

c) Web Page - Gary Cohee Web Page Coordinator
Gary reported that the link to the 2005 POWID Nashville Conference WEB page is www.isa.org/powersymp. This link will stay in effect for future conferences. Gary will put a hit counter on this site so he can keep track of usage statistics.

If POWID ExCom Members have any information that they want to display to the POWID membership, just send that information to Gary in electronic form and he will post it on the POWID web page. Gary’s e-mail address is garyacohee@aol.com.

ISA/POWID CONFERENCES

a) Colorado Springs, Colorado - 6-11 June 2004 - Denny Younie (General Chair) and Cyrus Taft (Program Chair)
Denny reported that the final conference report is being held up due to the lack of financial information from ISA. As discussed during the Financial Reports (see Section 5.b.4) Rodney Jones will provide an August break down of Division financial from which conference financials will be identified.

Action: Dennis Younie will provide a final Conference Report for the Colorado Springs conference.

b) Nashville, TN - 5-9 June 2005 - Denny Younie (General Chair) and Cyrus Taft (Program Chair)
Denny reported that presently the conference has three major sponsors and four table tops. He is looking for two more sponsors and expects more table tops to be sold. A keynote speaker has not been confirmed, although a couple of individuals will be contacted. Presently, three training courses are scheduled; 1) Tuning Feedback Controllers, 2) Measurement of Uncertainty Fundamentals, and 3) Cyber Security for Control Systems. We are trying to get a one-day course for the Introduction to Boiler Controls by Jerry Gilman.

Denny noted that the hotel is offering a Sunday night opening reception with promotion from the major sponsors. Also an informal spouse program is being prepared for three events.

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Cyrus reported that presently there are 54 abstracts but that only a few papers (approximately 10) have been submitted for review. There are two sessions for Nuclear because of schedule conflicts with NRC. However, the Fossil sessions are quite full. Cyrus is considering creating a new session for instrumentation and needs to solicit a session developer. The Session schedule is on the web and will be in the newsletters. Most papers were submitted from the call for papers or personal contact.

c) Phoenix, AZ or San Jose, CA - June 2006 - Marjorie Widmeyer (General Chair) and Bob Webb (Program Chair)

Neither Marjorie nor Bob attended the meeting. Bob participated via a telephone conference and reported that he and Marjorie visited various 2006 Conference location in San Jose and provided hotel recommendations to POWID. Charlotte Clayton, ISA Manager of Meetings, is exploring commercial options at Doubletree Hotel (San Jose, CA) and two hotels in Phoenix, AZ.

Action: Marjorie Widmeyer, Bob Webb and Charlotte Clayton are to complete the hotel search and submit proposed hotels for Executive Committee vote.

(Note: The Doubletree Hotel in San Jose, CA was subsequently selected and approved for 2006 Conference.)

Bob reported that he and Marjorie are in favor of a NOx Conference in conjunction with the POWID Conference.

Action: Marjorie Widmeyer and Bob Webb to verify if the NOx Conference fits within our Conference plans and to submit a NOx Memorandum of Understanding to the Executive Committee.

Bob reported that he and Marjorie are in favor of including Scientech User Group meeting in conjunction with the POWID Conference. A Memorandum of Understanding is presently in draft form and will be submitted to EXCOM for review.

Action: Marjorie Widmeyer and Bob Webb to issue a Scientech Memorandum of Understanding to the executive committee.

Bob reported that a training program is still being developed. System security is a possible tutorial.

d) Pittsburgh, PA - 5-10 June 2007 - Mike Skoncey (General Chair) and Allan Zadiraka (Program Chair)

Mike reported that Charlotte Clayton (ISA Manager of Meetings) worked on completing a hotel contract with the Pittsburgh Sheraton Station Square hotel and confirmed that the contract with the hotel is signed. Mike is working with local vendors (i.e., Emerson) to provide training and possibly a river cruise for sponsor with live band.

e) Phoenix, AZ - 2008, TBD

Denny Younie reported that Tom Zuvlis is interested in being the General Chair for the 2008 conference.

Action: Gary will confirm Tom Zuvlis’s commitment to support the 2008 General Chair role during the POWID conference in Nashville.

ISA TECH/EXPO CONFERENCES

a) Houston, TX - 5-7 October 2004 - Danny Crow, POWID Program Coordinator

Danny was not present the meeting, and did not submit a report.

Gary noted that POWID had three technical sessions, with two to four papers in each. Gary thanked the three session developers (Roger Hull, Tom Stevenson, & Tim McCreary).

b) Chicago, IL - 2005 - 23-28 October, Dave Roney, POWID Program Coordinator

David was not present at the meeting, and did not submit a report. Cyrus Taft and Allan Zadiraka both volunteered to be session moderators.

c) Houston, TX - 2006

Gary Cohee is soliciting a volunteer to be POWID Program Coordinator for 2006 and will fill this position at the Nashville conference.

OLD BUSINESS

a) ISA Divisions’ New Venture Initiatives

This topic is covered in the Long Range Planning report (See Section 5.c.4).

b) ISA POWID/EPRI Joint Conference Name Change

Roger Hull reported that no new discussion was held to develop a consensus for a new POWID name. The name change was left as an open item to continue at the next POWID ExCom meeting.

c) EPRI/ISA POWID Memorandum of Understanding

Gary Cohee reported that he has not seen a final EPRI/ISA POWID Memorandum of Understanding with all parties’ signatures.

Action: Rodney Jones and Gary Cohee will seek to obtain all party’s signatures to the EPRI/ISA POWID Memorandum of Understanding.

NEW BUSINESS

There were no new business items for the Executive Committee to discuss.

NEXT EXECUTIVE COMMITTEE MEETING

The Power Industry Division Executive Committee’s next meeting is in Nashville, TN, on 5 June 2005 at the Millennium Hotel.

ADJOURNMENT

POWID Director Gary Cohee asked for a motion to adjourn. Bob Hubby made the motion to adjourn the meeting and Jim Olson seconded the motion. The motion was approved by voice vote of the POWID ExCom members present. The meeting was adjourned at 5:15 p.m. EST.
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