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The 2010 IEC General Meeting in Seattle, hosted by the USNC, was the largest in IEC history and by all accounts a great success. The 10-day event brought together over 2,500 delegates representing more than 80 countries at 400 meetings of Technical Committees, Subcommittees, and working groups, plus many policy meetings and special events. The discussions held between these worldwide experts will influence the electrotechnical community and its activities in all aspects of international standardization across nearly every industry for years to come. The USNC congratulates all its members, associates, sponsors, and participants from around the world on this tremendous achievement.

Seattle GM Initiates a Focus on Systems Standardization

A personal observation by Alec McMillan, USNC Vice President Technical

I want to thank the USNC constituency for their strong technical participation and financial support of the 74th IEC General Meeting (GM) October 6–15 in Seattle. I want to particularly recognize the committed leadership and personal dedication of our outgoing president, Jim Matthews, and the support of the USNC and American National Standards Institute (ANSI) staffs in delivering such an outstanding event.

As I attended board, council, and bilateral delegation meetings throughout the week, one thing I was struck by was an emerging consensus from these diverse agendas: the IEC needs to address systems in a more formal manner to meet the future needs of the IEC stakeholders.

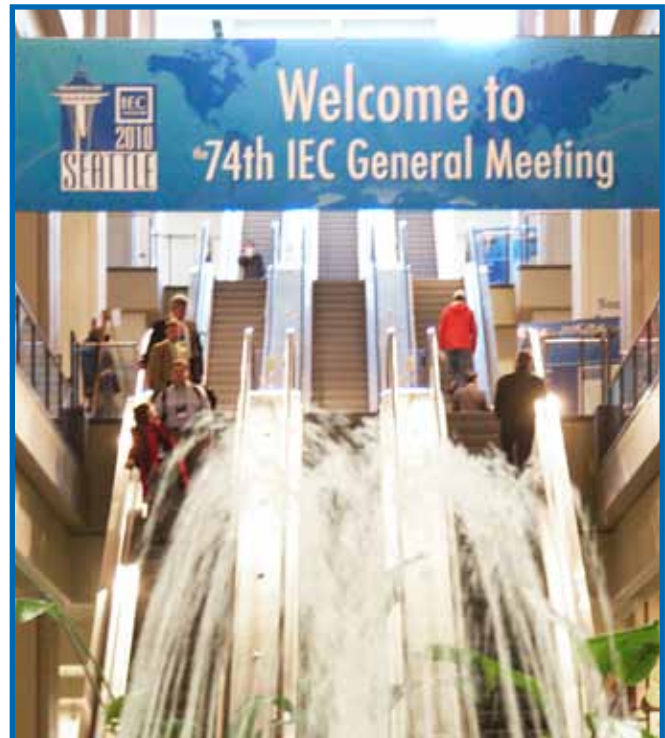
Identifying Needs

From a technical perspective, the Market Strategy Board (MSB) report on efficient energy generation, distribution, and

consumption highlights needs for system standards and conformity assessment systems. This report, along with an Italian new work item proposal (NWIP) for an energy management standard, are now on the agenda of the Standardization Management Board (SMB) Strategic Group (SG) 1, *Energy efficiency and renewables*. But what are the responsibilities of individual IEC Technical Committees (TCs) within the energy systems space? And how do these energy standards groups interact with each other and external standards developers such

as the International Organization for Standardization (ISO) and their developed energy management standards?

The SMB SG 3 on Smart Grid reported on progress in identifying the portfolio of standards that will combine within a Smart Grid system, including referencing *(continued)*



Seattle Initiates a Focus on Systems Standardization *(continued)*

a proposed methodology for management of the work. Phase 3 of the U.S. National Institute of Standards and Technology (NIST) program is addressing the conformity assessment needs within the proposed Smart Grid system.

A further MSB report on “System Level Conformity Assessment” was approved. The report calls for a joint collaboration between the SMB and the Conformity Assessment Board (CAB) to develop an appropriate IEC infrastructure that can meet stakeholder needs in the systems arena and build on the existing strength of the standards TC and conformity systems organization. The objective is to establish a framework and deliverables that will enable a range of system-relevant standards and conformity assessment services to be developed in the IEC.

The report also recognizes the need for future joint planning of tasks under the responsibility of both the SMB and the CAB (standards writing and conformity assessment processes), and stresses that systems-level conformity assessment will only be possible if a wide range of IEC processes are improved to recognize and address system requirements.

Innovations and Changes

As I am often reminded, “systems” are not a new issue for the IEC. With the advent of smart technologies – beginning with communications and IT, and now extending to nano and bio – electrotechnical products, components, and materials are becoming smarter. They are able to dynamically interact to create system-level functionality not previously possible.

The IEC has instances of system standards with some aspects of conformity assessment in place, but they exist as stand-alone implementations – e.g., functional safety or wind turbines. What is new are the developments in materials, the proliferation of embedded IT capability within products, and an increasing focus of regulators and non-government organizations on health, safety, energy, environment, and security of

electrotechnical products and systems.

Thus, products delivered to markets are now often a component of a broader system, and product standards may need to incorporate system functionality to support these system domains. Many products from multiple TCs are finding that they have to connect, interoperate, and/or co-exist in one or more particular system domains requiring more than the simple specification of a hardware (communication) interface. These systems are complex in nature, and the individual product functionality required has to be derived from a broad system-level specification that addresses all the needs for the life cycle of the system – from conceptual design through building, testing, commission, operation, maintenance, and removal at end of life.

Systems-level conformity assessment will only be possible if a wide range of IEC processes are improved to recognize and address system requirements.

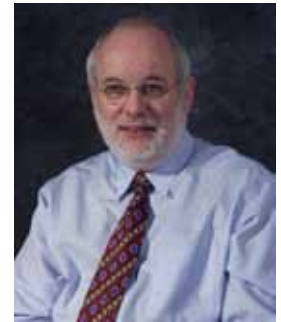
Ultimately, customers seek confidence in their purchases based on the adoption and use of standards and a demonstrated compliance with these standards. A set of IEC system standardization services which facilitate a customer’s ability to select appropriate products and services from multiple vendors to implement a required integrated system based on use of confidence-building common standards and conformity assessment systems would meet a market need and assist vendors in delivering such systems more efficiently.

Continual Efforts

In parallel with these new system initiatives, the SMB still has to resolve the ongoing TC 23, *Electrical accessories*, plugs and sockets regional differences. The multimedia community is seeking an answer to one

universal personal digital device charger. And the electric vehicle industry is debating international standards for power sources and charging stations for smart cars traveling on smart highways.

All of the above efforts require an open, collaborative approach between the specific domain experts involved so that a system-level specification can be developed that will define the products and services that make up that system. The individual traditional IEC TCs and other standards developing organization (SDO) participants can then ensure that the required system functionality is enabled in their standards. The resultant products built to the standard would then also be recognized as compliant with particular system specifications.



Alec McMillan, USNC
Vice President-Technical

The Big Picture

Development of an organizational or infrastructure proposal to respond to system needs is consistent with other organization initiatives within IEC. The IEC president’s recent project team made some recommendations for reorganizing existing TCs based on utilization of market segmentation, as an alternative to the current product-based segmentation. Unfortunately, their review did not include the work scopes of SGs, the sector boards, or the advisory committees of the SMB, and did not look into the need to address systems. It also attempted to group TCs in a “fixed” structure, which does not reflect the dynamic nature of systems implementation in the marketplace.

The new IEC 2011 Masterplan *(continued)*

FEATURED ARTICLE

Systems Standardization*(continued)*

will be approved this coming year and will address not only systems and organization, but also IT tools, the third piece of the IEC infrastructure. Given the necessity for collaboration across geographically dispersed TCs, as well as with other SDOs, an improved IT support system for document development and conformity assessment system implementations is envisaged. Concurrent twenty-four hour access to document development would encourage greater stakeholder participation and begin to address the growing concern over a dwindling source of subject matter experts in these new fields.

Jim Matthews's election to IEC vice president and chair of the SMB is timely and fortuitous from a U.S. perspective in that we can be confident that he will be driving the approved IEC Masterplan agenda forward. But we also need to rely on you, the USNC constituency, to once again play a valuable role in shaping the future of the IEC organization to meet your business needs. Change requires good ideas, along with the volunteer work effort needed to implement those ideas!

In my capacity as incoming USNC vice president-technical, and as your IEC SMB representative, I am urging that you take note of the activities within the IEC, even if they appear at first glance not to be applicable to your TC or business. In this connected world, where all stakeholders are seeking ways to reduce costs and improve performance, a solution for one particular TC could easily become the preferred solution for all TCs facing a similar issue.

If you have a volunteer expert with a particular interest in the aspects of systems standards and conformity assessment, I would welcome this person to join a USNC group I will be setting up at the next Technical Management Committee (TMC) meeting in January. I look forward to your support in establishing an IEC agenda in the U.S. to meet your business needs. ■

USNC NEWS

Get Involved in the USNC/IEC Council

The Fall 2010 issue of this newsletter focused on “getting on the dance floor,” i.e., increasing participation. Following an overwhelmingly positive response, we are continuing that momentum with a discussion of one area of USNC participation that is critical to our ongoing success: the USNC/IEC Council.

Council Basics

The USNC/IEC Council coordinates the U.S. involvement in the IEC and other associated electrotechnical bodies. The main focus of the Council is to manage policy and strategic issues and to improve the overall effectiveness of the USNC's interface with the IEC. It also coordinates USNC activities with appropriate standards boards to promote consistency between those international and national activities that fall within the scope of the IEC.

The Council meets three times each year, and interfaces with the IEC Council and Council Board (CB) via the USNC president, who serves as the Council chair. The current representation of the Council comprises 26 individuals representing industry, trade associations, standards developing organizations, professional engineering societies, and government agencies.

Key responsibilities of the USNC/IEC Council include the following:

- Represent and coordinate U.S. involvement in the IEC and other electrotechnical bodies associated with the IEC
- Recommend an annual budget to cover IEC activities
- Manage programs and adjudicate disputes arising from authorized USNC activities

“Unless you serve on the USNC Council you have no idea the work of the USNC officers and staff in supporting all USNC activities. This runs the gamut from discussing and casting votes on policy issues critical to the U.S. objectives, to providing ever increasing communications to all USNC participants with real life examples of how to succeed in our IEC activities.”

– Jack Wells, Vice President for Corporate Development, Pass & Seymour/Legrand; Chair, USNC Communications and Continuing Education Committee

- Coordinate USNC activities with appropriate standards boards to promote consistency between those international and national activities that fall within the scope of the IEC
- Report annually to the ANSI Board on U.S. participation in IEC activities and coordinating with the International Policy Committee on issues affecting U.S. interests on more than one international forum

The USNC Council has also established Standing Committees that mirror the terms of reference of the IEC Advisory Committees with the following focuses: Finance, Nominations, Standards for Safety of Electrical Equipment, Conformity Assessment Board (CAB) Policy Coordination Committee, Communications & Continuing Education, and General Meeting Planning Committee.

The USNC/IEC Council needs your active participation. Get involved and play a critical role in reaffirming U.S. commitment to international standardization, creating opportunities for U.S. industry to participate in standards activities that promote global market access, raising awareness of IEC international standards to U.S. industry, and fostering continued international cooperation in electrotechnical standards activities.

Further Information

Contact USNC General Secretary Charlie Zegers (czegers@ansi.org; 212.642.4965. ■

The SMB Torch Is Passed

By Frank Kitzantides, former IEC Vice-President and Chairman of the Standardization Management Board

In January 2004, as I started my first term as the new Standardization Management Board (SMB) chairman, I shared some thoughts with the Board on the role of the SMB in directing IEC technical activities in the future. I told them that the IEC had been making great strides in improving productivity and accelerating standards development – but we were not there yet. There were still demands from the marketplace to further improve the management of our technical work, produce a more flexible standards system, reduce duplication, and strengthen our cooperation with the International Organization for Standardization (ISO), the International Telecommunication Union (ITU), and other international and regional organizations.

There were then and still are a number of global drivers that will determine the course of trade and commerce and the pace of globalization. These include the dramatic role being played by electronic commerce, the formation of more and more joint ventures, and the development of even more sophisticated IT tools. The IEC will have to define the requirements for tomorrow’s products to assure that new standards add value and continue to meet customer and market requirements.

Overall Objectives

The SMB has a significant role to play in this re-defining process. It must:

- continue to examine working methods and improve efficiency;
- improve SMB’s relationship with Sector Boards, Advisory Committees, and Technical Committees (TCs);
- initiate a strategic planning mechanism for areas of new technology;
- work to maximize the use of IT tools in the development of IEC standards;
- implement global relevance, the dual logo arrangements, and other programs to maximize global acceptance of IEC standards;

- enhance collaboration with regional standardization organizations; and
- increase cooperation with ISO and ITU, and minimize duplication.

The SMB should look to ensure that standards are market relevant and are produced efficiently. If there are delays, the SMB should locate the root causes and do something about them. And the SMB should not hesitate to initiate standardization work in areas of new technology. The SMB must also ensure that there are mechanisms in place for handling conflicts that go beyond the TC or Subcommittee (SC) level. I was hoping to contribute to the transformation of the SMB into a dynamic force that leads, manages, acts, and sets clear objectives. And I felt the SMB needed its own Standardization Strategy to support the IEC Masterplan.

Continuous Improvement

Seven years have passed since my first meeting as the SMB chairman. At the IEC GM in Seattle in October, I gave a summary of our accomplishments to the IEC Council and reported that I was reasonably happy with what we had achieved.

The SMB now has a Standardization Strategy with annual implementation plans. We made several SMB operational and internal management changes, and re-engineered IEC’s project management process, including shortening the voting time. We established several strategic groups (e.g., energy efficiency, Smart Grid), and created a number of new TCs. We developed a Global Relevance (GR) Policy that was approved by the IEC Council Board and a “tool kit” on how the TCs are to use it. And the SMB introduced the “system approach” in 2004 because it felt that this was the future of IEC standardization.

We streamlined the procedures with the European Committee for Electrotechnical Standardization (CENELEC), and improved substantially our relationship with the ISO



Frank Kitzantides (right) receives a certificate of recognition for distinguished service from IEC President Jacques Regis (left) at the 2010 IEC General Meeting in Seattle

Technical Management Board, both at the management and operational levels, with joint annual group meetings, and cooperation on energy efficiency issues, security, nanotechnology, and automotive electrotechnics.

So we have made improvements on many fronts, but not 100%. There have been some disappointments, and there is still work to be done. Our “continuous improvement” is not finished, and I know that my successor, the new IEC vice president and SMB chairman, Jim Matthews, will continue the pursuit to excellence. I wish him much success.

The following are a few areas where I think the IEC should focus:

- 1. Finding a new CEO.** With Ronnie Amit retiring shortly, the process of finding his successor has begun. This will be a difficult task, as Ronnie has been an exceptional CEO and a great asset to the community. The new CEO must not only be a good internal manager but an effective external communicator as well who can work cooperatively with ISO, ITU, etc., and with all the presidents of the National Committees. This may be a job too big for one person, so the IEC should consider also hiring a deputy: a CEO for external relations to deal with the policy issues, and a COO with a technology/engineering background to deal with the internal management and technical issues. *(continued)*

The SMB Torch Is Passed *(continued)*

2. Relations with ISO, ITU. While our dealings, particularly with ISO, have been improved, there are and will continue to be jurisdictional issues as technologies converge and need to be constantly addressed. The CEN-CENELEC “rapprochement” with a new common management center and one CEO could have an impact on ISO and IEC. If it is successful, similar pressures may be applied by our European friends to consolidate the ISO/IEC management activities too.

3. Structure of the IEC technical work and governance. Issues of direct industry participation and re-engineering the technical work have been addressed with short-term solutions that have not proven to be effective. There are now pressures and challenges to address these issues in a more direct way, including building relationships with consortia and possible consolidation and/or groupings of TC/SCs to even out their workloads and further implement the “system approach.”

4. The “value proposition.” Promoting the importance and strategic value of IEC work to industry leaders and other stakeholders must be constantly and aggressively pursued through trade associations, industry groups, government circles, etc. This is not only the job of the IEC CEO, but of the National Committees as well. Consistent with that should be the establishment of stronger links with government officials, international and regional business bodies, academia, and research institutes.

5. SMB Standardization Strategy.

The strategy should be reviewed at least annually and updated as the IEC Masterplan is revised. While several of its strategic objectives may still be consistent with today’s priorities, the annual implementation goals for standardization needs must constantly be reassessed.

6. Improved efficiency. It is important to review current business models and consult with stakeholders on ways to increase efficiency and speed for time to market. Opportunities for full use of IT tools and virtual meetings must be pursued on a continuous basis.

7. Global relevance. Implementation of the GR policy must be aggressively pursued. This should become one of the priorities of the new SMB, to ensure that the market relevance of IEC standards is fully understood and embraced by the TCs. The SMB must monitor the efforts of TCs to see that their practices do not create market access problems and non-tariff barriers to trade.

8. New technologies. Assessing future technologies and advising the IEC of potential standardization opportunities has been an objective of the SMB Standardization Strategy. With the formation of the Market Strategy Board (MSB) and its mandate to identify technological trends and market needs, it is crucial that the SMB and MSB cooperate to address emerging and converging technologies.

The above are a few of the areas where I believe the IEC and SMB should focus their attention. There are additional key issues in the new IEC Masterplan to be explored in detail by the IEC Executive Committee and the Council Board in 2011.

It has been an interesting and rewarding journey for me, as I close this chapter of my 30-year professional life. As I think back to the many IEC meetings in the various member countries, I am proud of the contributions made by so many that have resulted in a considerable exchange of knowledge – and, in some cases, true friendships – all for the purpose of promoting better understanding among the countries and the people involved. Good luck to Jim and the SMB, and much continued success to the USNC. ■

ANSI eStandards Store Purchases Support USNC



Standards developed by IEC can be purchased from a variety of websites, organizations, and third-party resellers. But to see the greatest benefits from dollars spent, USNC members should purchase standards directly from the American National Standards Institute (ANSI), since the revenue from ANSI’s eStandards store directly supports the activities and initiatives of the USNC.

The USNC/IEC is a totally integrated committee of ANSI. As such, the Institute provides administrative support to the USNC and its nearly 1,400 managerial, engineering, scientific, and professional participants.

ANSI also provides the fiduciary framework by which the USNC’s financial obligations are met, including the payment of annual dues to IEC. And since ANSI is a non-profit organization, the revenue earned from your purchase helps to support the programs and services offered to USNC members, from workshops for U.S. Technical Advisory Group (TAG) Administrators to this latest issue of the *News and Notes* newsletter.

When you purchase IEC standards from ANSI, you are making a commitment to bolster U.S. leadership at the IEC table. And purchasing standards directly from ANSI’s eStandards Store offers the additional benefits of cost savings for ANSI members, personal service, and the convenience of onestop shopping for more than 230,000 standards available for immediate download.

Further information

Contact the ANSI customer support team (212.642.4980; info@ansi.org) or visit the eStandards Store (webstore.ansi.org). ■

We Did It!! IEC Seattle 2010 Exceeds Expectations

By Jim Matthews, IEC Vice-President (SMB) and Chair, USNC 2010 Planning Committee

The 74th IEC General Meeting (GM) was held in Seattle October 11–15, along with associated technical meetings October 4–16. By all measures and reports, it was a great success. The U.S. electrotechnical community worked together to make this possible – and thanks are due to all.

We began planning this meeting almost eight years ago. A steering team was formed with representatives from the sponsors, the USNC Council and Technical Management Committee (TMC) membership, and the constituency at large. This team looked at the logistics, finances, and resources needed to host a successful GM, and worked together to plan it all out.

Early support from the American National Standards Institute (ANSI), its Board, and the USNC membership were good signs that we were on the right track. A critical decision was the selection of ConferenceDirect and the management team of Steve Pampinella and John Vanella to assist us. As it turns out, we were so grateful for the expert professional guidance provided by John and Steve that we will be presenting them with an honorary life membership in the USNC.

Site selection started with over 50 possible cities. We quickly narrowed it to 10, sent requests for information, and then held interviews with representatives for the four finalists. In the end, Seattle was the ideal choice: great meeting facilities that are close

to hotels and restaurants in a safe, walkable city that was just the right size for our GM.

IEC General Meetings range from small – about 20 Technical Committees (TCs) and Subcommittees (SCs) – to large – 52 TCs/SCs and 1,788 attendees in Kyoto, 1999. But we knew the U.S. meetings were going to be among the largest. As it turns out, it was in fact the largest GM in the history of the IEC. We hosted 84 countries, 2,590 people, and 100 TCs/SCs. The scheduling was complex, but we were able to work with the TC Secretaries to try and accommodate almost everyone’s needs. There were a total of 334 technical meetings resulting in the equivalent of over a year of meetings. And of course there were also the IEC policy meetings – Standardization management Board (SMB), Conformity Assessment Board (CAB), Council Board, and many others.

The total budget for the meeting was just under \$2.5 million. Thanks to almost universal support from the U.S. constituency, and their ability to pay pledges over a 5 year period, we were able to keep the meeting “in the black” financially. Together we demonstrated the strength of the U.S. community through 59 General Sponsors (technical and management meeting support) and 94 Technical Sponsors (technical meeting support only). A few organizations also donated needed materials and equipment for the meeting (Hubbell – power strips; Hewlett Packard – printers; Sony – laptops; Sharp – LCD monitors). At the end of the meeting, we were able to help the Pacific Northwest community with the donation of the Hubbell power strips, HP printers, and Sony laptops to the Northwest Autism Center in Spokane, WA. The extra LEGO Space Needle models were given to Toys for Tots in New York City and the Ernie Davis Community Center in Elmira, NY.

Each IEC GM is different from the one before it due to factors such as the host committee, the venue, and the evolution of the IEC portfolio of activities. Twelve years

ago in Houston, the U.S. introduced the first electronic meeting. In Seattle we transitioned to the networked era with the first use of social media – IEC 2010 had not only its own web page, as usual, but also the first ever General Meeting Facebook page.

We took the traditional “Business Center” and transformed it into a new, multifunctional “Networking Center.” This enormous space included the usual laptops, network connections, print on demand facilities, and work tables, but also provided seating areas for informal discussions, a continuous coffee break, and an exhibition of National Committee tabletop displays and TC/SC posters.

This was also the first meeting where the new the Thomas Edison Award (proposed by the USNC) was presented to TC/SC officers for their leadership. The IEC held an extended workshop over three days for TC/SC officers, and also a highly successful, first-ever Young Professionals Workshop. On Friday afternoon, the Council Open Session featured keynote speaker Dan Reed of Microsoft, followed by a stellar panel on “Energy Generation, Distribution, and Conservation” moderated by our colleague Frank Kitzantides.

Special thanks must be given to our ANSI/USNC Team, led by our General Secretary, Charlie Zegers, who were the glue that held us together. They did all this without missing a beat in their regular (more than full-time) jobs. As we close out 2010 and move into new challenges in 2011, please take a minute to congratulate each other – this was a true team effort of our electrotechnical community. We should all be proud of what we accomplished together. ■



Jim Matthews

(l-r) USNC General Secretary, Charlie Zegers, Jim Matthews, and IEC President Jacques Régis



IEC 2010 SEATTLE

My First IEC General Meeting

By JoAnn M. Emmel, Ph.D., USNC Consumer Advocate; Associate Professor, Department of Apparel, Housing and Resource Management, Virginia Tech University

This past October I had the privilege of attending the 74th IEC General Meeting (GM) in Seattle. Because this was my first GM, I was asked to share my experiences and reactions.

I had a number of goals for my attendance at this meeting. These included taking part in the poster session with a display about consumer involvement, talking with other National Committees (NCs) about their use of consumer representatives, and learning more about the scope of the IEC. The registration process was very easy to follow, but because I was an observer for much of the meeting, I needed help from the USNC office to assist me with planning my week so that I could have as many different experiences as possible.

Destination: Seattle

I arrived in Seattle on Sunday, October 10, ready for an interesting and fast-paced week. The events started that evening with an overview at the USNC gathering, followed by a delightful buffet dinner.

From all indications, Seattle proved to be an excellent choice for this GM. It not only offered great conference facilities, meeting room space, and lodging in close proximity to one another, but also had many other attractive features. Seattle is filled with fine restaurants and interesting attractions both in the city and around the area. Pike Street Market was a popular destination, and many international delegates extended their stay either before or after the meeting to take advantage of the area attractions.

IFAN Conference

Because I was planning to be in Seattle for the IEC General Meeting, I was invited to address those attending the International Federation of Standards Users (IFAN) Conference, also held in Seattle. The theme of their conference was “Standards: Challenges



Seattle was an excellent choice for this GM, offering not only great conference facilities and lodging in close proximity, but also many interesting area attractions for visitors.

of the Future.” The morning session began with a keynote by Michael Taubitz of FDR Safety on the challenges of standardization. Mr. Taubitz was followed by a number of speakers on various aspects of standards education and promotion, and the use of standards in industry.

I was part of the first afternoon session entitled, “Relevance of Standards,” and my topic was “Standards and the Consumer.” Prior to this meeting I was unaware of IFAN, and I sensed that many of the attendees were not very familiar with the inclusion of consumers in the standards process. From the questions and comments I received, it seems that they welcomed the opportunity for insight into consumer participation.

Poster Session

Something new this year was a poster session where Technical Committees (TCs) / Subcommittees (SCs) displayed posters about their committee work and a few companies had exhibits as well. I took part in this event by displaying a poster about consumer involvement in the IEC standards process. Although there were only two established times for poster sponsors to be at their posters, once at the beginning of the meeting and once at the end, the room always seemed to be buzzing with activity. It appeared to be an excellent place for people to meet, have some refreshments, and network about activity in their TC/SC.

I had many people stop by my poster to ask questions and I found it to be a good way to interact with the international delegates. The poster format appeared to be an extremely successful venue which received high marks from the attendees I spoke to. The conference facility allowed room for this event, but other NC delegates commented that it might be difficult to reproduce at other meetings because they would not have the space to do so.

Meetings

The heart of the general meeting is, of course, the coming together of delegates from the around the world to discuss the issues and business of IEC as well as specific standards. The sheer number of these meetings going on during the week was impressive. I sat in on a number of different meetings for the exposure to the various aspects of the organization.

The first was the SMB meeting which seemed like a typical organizational meeting, where consensus was sought on the issues and topics that needed to be addressed. I also remember the Council Statutory session as another information sharing meeting. These meetings have helped me learn a *(continued)*

My First IEC General Meeting *(continued)*

little more about their function within IEC, but I also realize there is still a lot I need to know to truly understand how all of the pieces fit together. I continue to find new groups of IEC that are not familiar to me.

I also attended a portion of the TC 61 and TC 59 meetings which I found to be extremely well organized and somewhat fast paced, given all of the documents they needed to cover. I was impressed with how well informed the participants were on the wording of the standards changes and proposals before them, and the secretaries were very skilled at keeping the meeting moving. It was clear that delegates were well prepared and were ready to address the topics presented. I have worked with TCs from other SDOs so could follow what they were doing a little easier than some of the other meetings.

One of the most interesting meetings to sit in on was the USNC meeting with CENELEC. This small venue allowed for face to face dialog of the two groups. The atmosphere was relaxed and friendly, and both groups were able to bring up topics of concern that were carefully outlined in advance. This meeting moved very quickly and the exchange appeared to be very

beneficial for confirming an understanding on various issues.

I found the final open session quite informative given my interest in energy and sustainability issues. The panel addressed many of the emerging technologies in the field of energy, all of which will require careful evaluation for standards. Because each of these impacts consumers I foresee a need for consumer input on these technologies.

Food, Fun, and Friendships

Food, fun, and friendship were included at both the opening session and the farewell dinner. The opening session began with a trip around the United States via photographs. The international guests couldn't help but be amazed at the breadth and variety of scenery, topography, and culture present in our country, and I am sure the U.S. citizens, as I was, were very proud of what they saw as well.

The main program that followed included the music and dance of the Native American culture of the Northwest. It was an emotional and inspiring program performed by a very talented group from the area. This was followed by a large array of food stations

that offered a variety of food items. The evening was topped off with a most enjoyable band whose rhythmic music enticed many onto the dance floor.

The farewell dinner was a lovely sit down meal. It was a nice opportunity to hear from many of the key people in IEC and to recognize the planning committee for their fine efforts. Once again we were entertained by a musical group, this time from Louisiana. In addition, delegates could have their photo taken with a space needle back drop as a souvenir from the meeting.



JoAnn M. Emmel, Ph.D., USNC Consumer Advocate; Associate Professor, Department of Apparel, Housing and Resource Management, Virginia Tech University

An Overall Impression

Overall, I felt this General Meeting was an exceptional event. It offered the attendees a wealth of meaningful sessions and opportunities to conduct important business, along with enjoyable entertainment and excellent food. Many international delegates and accompanying persons shared with me how impressed they were with all facets of the meeting and how much they were enjoying themselves. Handling this many participants and organizing so many meetings was no small feat, but it seemed to proceed without any problems.

Personally, the meeting offered me the opportunity to view the entire scope of IEC. I was also able to put a face with the names I had corresponded with and meet many interesting people from around the world. The USNC Planning Committee is to be commended for their ideas and efforts to make this such an excellent meeting. ■

StandardsBoostBusiness.org

An Awareness Campaign for Business Leaders

The Standards Boost Business outreach campaign, a partnership between leading companies and organizations across the standards community, is working to bring the powerful message of the strategic value of standardization to corporate America. Learn more about how strategic standardization can help build, rather than constrain, innovation and enterprises at www.standardsboostbusiness.org



IEC 2010 SEATTLE

World Electrotechnical Experts Discuss Energy Generation, Distribution, and Conservation at Open Session of IEC 2010 General Meeting

As part of the IEC 2010 General Meeting (GM), the USNC hosted an Open Council Session on Energy Generation, Distribution, and Conservation on Friday, October 15. This free, open event featured a panel of world experts in alternative energies presenting the latest issues and innovations in such key areas as wind, solar, and nuclear energy technologies.

Opening the session was Frank Kitzantides, senior technology advisor at the National Electrical Manufacturers Association (NEMA), and IEC vice president and chair of the Standardization Management Board (SMB). Mr. Kitzantides provided introductory remarks on the world's increasing focus on innovative solutions for renewable energy, and moderated the panel discussions that followed.

Dan Reed, Ph.D., corporate vice president of technology policy and strategy and leader of the eXtreme Computing Group (XCG) at Microsoft Corporation, gave the keynote address. Dr. Reed raised the question of how standards can be more nimble and adaptive to keep up with the incredibly rapid rate of technological change. He highlighted the opportunity for smart technologies for energy management systems that are aware of energy-users' behavior and adapt accordingly.

Following the keynote, a panel of speakers moderated by Mr. Kitzantides discussed "hot button" issues in alternative energy. First, addressing wind energy was Sandy Butterfield, chief executive officer of Boulder Wind Power and chair of IEC Technical Committee (TC) 88, *Wind turbines*. Mr. Butterfield discussed how IEC standards have already defined a common engineering vocabulary, design process, and testing requirements for the offshore wind industry, facilitating its growth. He said what is still needed is international certification, plus consistent implementation, and suggested that a wind certification



Energy experts on the panel at the Open Council Session

advisory board could help harmonize the certification marketplace.

Next, Morgan Cox, health physicist at the U.S. Department of Energy's (DOE) Nuclear Regulatory Commission (NRC) and chair of IEC TC 45, *Nuclear instrumentation*, led a discussion on resurgence of the nuclear option. Mr. Cox gave an update on U.S. nuclear energy – currently at 20% of energy produced – and stressed the cost savings it provides.

Dr. Fumio Ueno then brought attendees up to speed on the latest in fuel cells. Dr. Ueno serves as the technology executive – devices and components control center – for the Toshiba Corporation, and is the chair of IEC TC 105, *Fuel cell technologies*.

Speaking on wave energy technology was Melanie Nadeau, technology manager for the marine renewable energy and small-scale hydropower research and development programs at CanmetENERGY, and chair of IEC TC 114, *Wave, tidal and other water current converters*. She stressed that the wave industry is still in the earliest stages of growth, so the broadest participation possible is critically important to ensure its robust development.

Next, Heinz Alexander Ossenbrink, head of unit on renewable energies at the Institute for Energy, European Commission DG Joint Research Centre, and chair of IEC TC 82, *Solar photovoltaic energy systems*, discussed solar photovoltaic (PV) energy systems. Mr. Ossenbrink stressed that PV is truly a global market, so IEC standards are the smartest

solution for trade facilitation. He said that the areas in particular need of attention are fire prevention ideas for PV-related rooftop fires, and better electrical interface standards for safety.

Two experts led the day's discussion of Smart Grid: Richard Schomberg, vice president of innovation sourcing and transfer at Electricité de France, and convener of IEC Strategic Group (SG) 3 on Smart Grid; and Dr. George Arnold, national coordinator for Smart Grid interoperability at the National Institute of Standards and Technology (NIST) of the U.S. Department of Commerce (DOC).

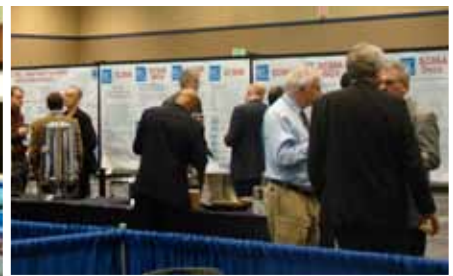
Mr. Schomberg said that Smart Grid standardization is going to be a never-ending evolution, and if it's built from strong chromosomes it will adapt, survive, and grow as circumstances evolve. Dr. Arnold stressed the prioritization of Smart Grid at the highest levels of the U.S. government. He gave an update on the Smart Grid roadmap that identifies 75 existing standards, plus 16 priority areas where gaps need to be filled.

Finally, Ziva Patir, vice president – standards, certification, and compliance for Better Place, shared her insights on e-transportation. She stressed that mass adoption of electric vehicles will result in significant new investments in power generation, transmission, and distribution capacity to allow for an effective charging infrastructure.

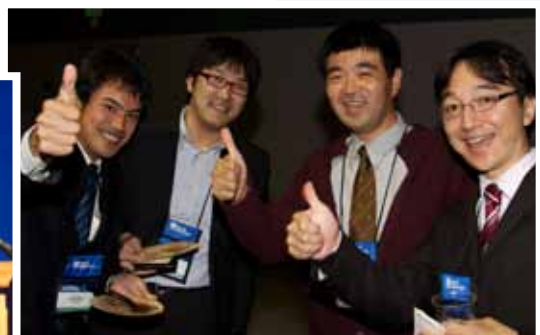
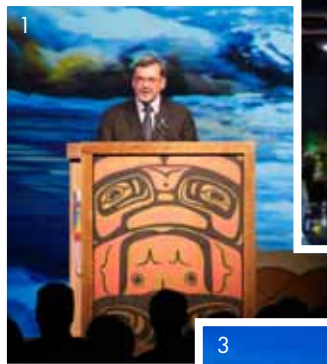
Overall, experts agreed that if the standards developed are performance-based, descriptive, systemized, adaptive, and globally harmonized, then the solutions are far more robust and efficient in the end. And while the consensus was that IEC is doing a tremendous amount of outstanding work in standards related to energy efficiency and alternative energies, the conformity assessment arena is not as harmonized and requires greater efforts. ■

IEC 2010 SEATTLE

Images of the IEC 2010 General Meeting in Seattle



IEC Immediate Past President Jacques Régis (1), IEC Vice-President (SMB) Jim Matthews (2), and ANSI President and CEO Joe Bhatia (3) address the Opening Ceremony crowd of thousands



IEC 2010 SEATTLE

Images of the IEC 2010 General Meeting in Seattle

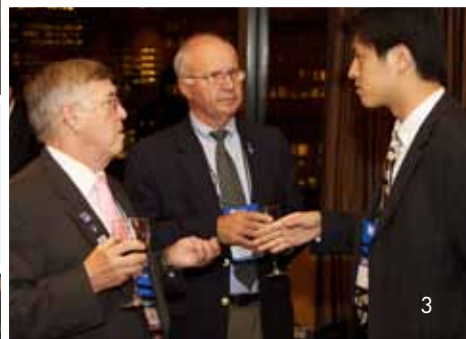
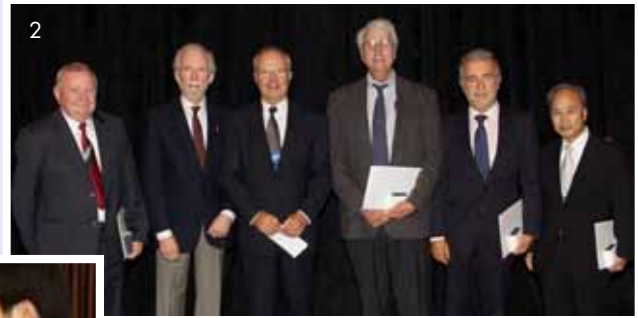


Jim Matthews and USNC President Phil Piqueira (1, l-r); IEC President Klaus Wucherer, former IEC Vice-President and Standardization Management Board Chairman Frank Kitzantides, and Jacques Régis (2, l-r); Jacques Régis, Klaus Wucherer, Frank Kitzantides (3)



IEC 2010 SEATTLE

Images of the IEC 2010 General Meeting in Seattle

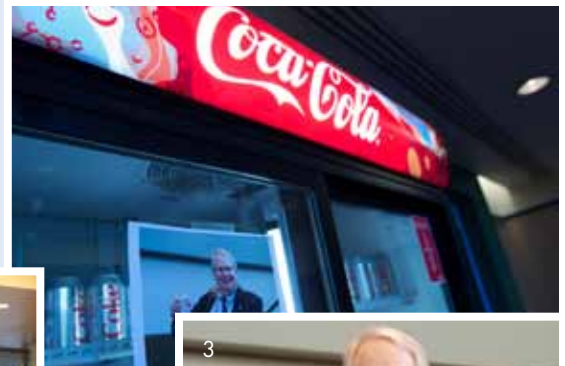


Phil Piqueira and Joe Bhatia (1, l-r); Frank Kitzantides (3rd from left) and the Thomas Edison Award recipients (2); USNC General Secretary Charlie Zegers, Frank Kitzantides, and Liang Zhang (3, l-r); IEC General Secretary and CEO Ronnie Amit, Lord Kelvin Award recipients, and Jacques Régis (4, l-r); USNC Deputy General Secretary Tony Zertuche and USNC Voting Coordinator Mary Johnson (5); Jim Matthews prepares for flight (6); Jacques Régis, USNC Supervisor Kevin Sullivan, and Apollo 12 Astronaut Alan Bean (7)



IEC 2010 SEATTLE

Images of the IEC 2010 General Meeting in Seattle



IEC Executive Committee (1); Ronnie Amit and Frank Kitantides (2, l-r); Jim Matthews and his beverage of choice (3); Founder and Executive Director of Northwest Autism Center Dawn Sidell with the Matthews family (4); Dawn Sidell accepts the donation of meeting equipment (5); Closing Ceremony performers Bonerama (6, 7); Charlie Zegers is presented with the giant meatball! (8)



Thanks Again to the Sponsors of the IEC 2010 General Meeting in Seattle



The General Meeting of the International Electrotechnical Commission (IEC) hosted by the United States National Committee (USNC) in Seattle, Washington, October 6 – 15, 2010, was the largest GM in IEC history. More than 2,500 of the world's foremost electrotechnical experts attended, and over 100 IEC Technical Committees and Subcommittees met over the course of the event. This tremendous success would not have been possible without the generous support of more than 150 sponsors contributing to the event. To learn more, visit the USNC website at www.ansi.org/usnc or the IEC 2010 website at www.iec2010.org.

General Sponsors by Category

The USNC/IEC gratefully acknowledges the 59 General Sponsors that committed financial resources in support of IEC 2010:

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U.S. National Committee/IECEQ
U.S. National Committee/IECEX

Thanks are also due to the 94 Technical Sponsors that committed their support to specific Technical Committee and Subcommittee meetings during the 2010 General Meeting in Seattle.

ON THE GRID

IEC Calls for Interconnected Smart Grids at G20 Summit in Korea

Building on the launch of its white paper, “Coping with the Energy Challenge,” at the World Energy Congress in Montreal in September, the IEC presented its call for interconnected Smart Grids to the G20 Ministerial summit in Korea in October. The IEC detailed how its work is enabling the interoperability and safety of Smart Grid projects around the globe. Smart Grids are a key factor in addressing both the energy challenge of the coming years and to achieve the ambitious carbon emission reduction charges of 20% by 2020.

Richard Schomberg, Chairman of the IEC Strategic Group (SG) 3 on Smart Grid, said, “The IEC is adding the *how*, be it with Smart Grids or more generally in smart electrification. Both are essential to increasing the efficiency of energy production and consumption, an important global issue, which is reflected by our attendance here at the G20 summit in Korea. At this summit, we have been able to demonstrate to senior government and industry figures how the IEC can help them to find ways to build more efficient Smart Grids and making the findings of our white paper a reality.

LAUGH TRACK

To the optimist, the glass is half full.
To the pessimist, the glass is half empty.
To the engineer, the glass is twice as big
as necessary, and needs to be redesigned.



Korea's Smart Grid test bed on Jeju Island

“The IEC sees its role as a technology enabler, leveraging its access to close to 10,000 experts and 162 participating countries,” Mr. Schomberg continued. “Together with our partners, we can ensure that Smart Grids and every technology-based energy efficiency initiative have a solid technical foundation to achieve a smarter use of energy.” The IEC is deeply involved in all major Smart Grid initiatives around the globe, with standards in use in significant numbers in Japan, South Korea, the State Grid of China (the largest utility in the world serving 700 million customers), Denmark, France, Germany, Italy, Spain, Sweden, Switzerland, the UK, the U.S., Canada, Brazil, and Australia.

The white paper focuses on the potential for “smart electrification” to help meet the challenges of a growing global population, diminishing natural energy supplies, and the need to reduce carbon emission levels. The paper proposes that electric energy is the most versatile and controllable form of energy and the easiest and most efficient to distribute, with little wastage and the potential to be produced cleanly. The paper explores what must be done to achieve the highest levels of energy efficiency. Through its assessment of the entire energy chain – from generation to distribution, consumption, and storage – the IEC uses a projection model to identify future standardization needs over the next 20 years.

The IEC was also invited by the Korean Ministry of Knowledge Economy to participate in the inauguration of Korea's Smart Grid test bed on Jeju Island. The Korean government got this Smart Grid project launched in a record time of 7 months, implementing core IEC standards and integrating innovations from 130 companies. The \$65 million pilot program consists of a fully integrated Smart Grid system for 6,000 households on Jeju Island, wind farms, and four distribution lines. The project demonstrates the extent of Korea's commitment toward an environmentally viable future. Korea plans to slash overall energy consumption by 3% and cut down total electric energy consumption by 10% by 2030.

Further Information

To learn more about the IEC's efforts in Smart Grid, visit

<http://www.iec.ch/smartgrid/> ■

CB-FCS: Factory Inspection on the Path to Success

The streamlining of the System of Conformity Testing and Certification for Electrotechnical Equipment and Components (IECEE) Certification Body (CB) - Full Certification Scheme (FCS) in 2010 proved to be the right thing to do. Harmonized documentation and forms and simplified procedures have turned what was a fairly complex scheme into an ideal instrument for companies that plan global product rollouts.

A Powerful Program

Most global companies launch their new products in many markets simultaneously. They need both timely access to these markets and the elimination of trade obstacles. To achieve these, speedy and cost-efficient conformity assessment (CA) is essential. It ensures compliance with national technical regulations and helps to ensure a homogeneous quality globally.

IECEE's objective in establishing the CB-FCS was to offer the most comprehensive product certification scheme in the world, based on the principle of mutual recognition of CA certificates and factory inspections by its members. Many IECEE National Certification Bodies (NCBs)

immediately seized upon the importance of the scheme and its impact on international certification. To date, 31 IECEE NCBs have signed the CB-FCS Multilateral Agreement.

Assessing Advantages

IECEE CB-FCS goes much further than the CB Scheme in that it combines the testing and certification of sample products with factory inspection and follow-up services related to the

product, the assembly line, and the factory itself. Product testing, factory inspection, and assessment of the factory's quality management system are centralized and further accepted by all members.

With CB-FCS the manufacturer is able to complete all certification and factory inspection steps in the country the factory operates in. Without CB-FCS, a factory certification involves the regular submission of samples to every export country, as well as initial and regular factory visits by inspectors from each of those Certification Bodies operating in the exporting countries – a process that is costly and time-consuming.

Proof Positive

IECEE CB-FCS provides the proof that each product from a certified factory offers a constant quality and safety level. The scheme is accepted in all participating countries and speeds up certification and market access by eliminating duplicate testing, sampling, and initial and/or factory inspections.

All members participating in the IECEE CB-FCS mutually recognize the CA Certificates and associated CA Reports,

including Factory Inspection Reports, as the basis for national approval or certification. In many cases they will be sufficient for direct acceptance by the market. To reinforce the trust among the CB-FCS Multilateral Agreement (MLA) Members, the issuing Certification Body must also grant its own certification mark.

Further Information

To view Signatories to the CB-FCS Multilateral Agreement, [click here](#). ■

IECEE CB-FCS provides proof that each product from a certified factory offers a constant quality and safety level.



IECQ and VDE at Electronica 2010



Networking, meeting electronic component manufacturers and suppliers holding the IEC Quality Assessment System for Electronic Components (IECQ) certification, promoting the IECQ services, and increasing visibility were at the heart of IECQ's presence at Electronica 2010. According to IECQ executive secretary Chris Agius, the trade show was a great opportunity to meet major players in the electronics industry sector and get a feel for future trends.

IECQ came to electronica 2010 at the invitation and hosting of VDE Testing and Certification Institute, IECQ's Certification Body (CB) in Germany. Gerhard Dreger, Managing Director of DKE, the German Commission for Electrical, Electronic & Information Technologies of DIN and VDE, the German Member Body of IECQ, said "VDE was pleased to welcome IECQ to one of the most important international trade fairs in the electronics sector. The combined presence of the two organizations was a great way of promoting conformity assessment activities and raising awareness."

The 2010 edition of the trade fair, which took place in Munich, Germany, from 9 to 12 November, was deemed a great success by its organizers. The event welcomed more than 72,000 visitors from a total of 115 countries. About 2,600 international exhibitors from 45 countries presented their products, solutions, and services. With 59% of exhibitors and 47% of visitors coming from outside Germany, Electronica positions itself as one of the major international events in the electronics sector. ■

CONFORMITY ASSESSMENT

SAVE THE DATES

IECEX Helps Brunei to Focus on Safety in Hazardous Areas

For the State of Brunei Darussalam in Southeast Asia, assuring the safety of its citizens is a priority. Brunei authorities have taken a number of steps to raise awareness both in industry circles and among the general public and to implement safety measures and regulations in the country. Personnel certification plays an essential role in assuring worker safety.

Of particular concern is the safety of workers in hazardous environments. With an industrial sector dominated by petroleum, petroleum refining, and liquefied natural gas – crude oil and natural gas production account for just over half of the Gross Domestic Product (GDP) and more than 90% of exports – a good part of Brunei's workforce is exposed to the risks associated with hazardous areas.

To deal with this issue, the Brunei Ministry of Development held a seminar on November 11 on the IEC System for the Certification to Standards for Electrical Equipment for Explosive Atmospheres (IECEX). The objective was to underline the importance of having

Brunei's petroleum production currently averages approximately 200,000 barrels per day.



competent workers handle the various activities associated with equipment used in potentially explosive atmospheres and surroundings.

Participants in the seminar learned that in Brunei, where a lot of work in explosive environments is done by contractors, it is often difficult to establish if the work complies with international standards. The need to have skilled workers carry out complex tasks is obvious in these types of dangerous situations. At the present time, there is no legislation in the country to enforce such compliance. The seminar may be a step in the right direction.

The event was organized by the Institution of Engineering and Technology (IET) with presentations covering both IEC and IECEX. Dennis Chew, officer in charge of the Asia-Pacific Regional Centre (IEC-APRC), gave a presentation on the IEC and its standardization activities. Wal Robson from the IECEX Secretariat in Sydney, Australia, spoke about IECEX in general and the specific requirements of the new IECEX Certification of Personnel Competence Scheme (CoPC). The CoPC scheme aims to provide the benchmark for personnel development and the minimum required competent levels for those involved in activities associated with Ex installations.

IET's William Voon observed that tenders requiring the employment of people with proper certification such as the IECEX certification for persons working in hazardous areas would reduce risks associated with using potentially dangerous equipment in explosive environments. ■

Upcoming Meetings & Events

JANUARY 2011

TMC/CAPCC/Council Meetings

January 19 – 20, 2011
Thermon Industries, San Marcos, TX



February 2011

SMB Meeting

February 16, 2011, Geneva, Switzerland

March 2011

CANENA Annual Meeting

March 2 – 3, 2011, San Antonio, TX

PASC 34

March 30 – April 3, 2011, Geneva, Switzerland

April 2011

COPANT Assembly

April 11 – 13, 2011, Santiago, Chile

MAY 2011

TMC/CAPCC/Council Meetings

May 18 – 19, 2011
Cooper Lighting, Peachtree City, GA

JUNE 2011

CAB Meeting

June 9, 2011, Stockholm, Sweden

SMB Meeting

June 10, 2011, Stockholm, Sweden

CB Meeting

June 15, 2011, Geneva, Sweden

SEPTEMBER 2011

TMC/Council Meetings

September 14 – 15, 2011, Washington, DC

SEPTEMBER 2011

75th IEC General Meeting

October 24 – 28, 2011, Melbourne, Australia

Visit www.ansi.org/calendar and enter "USNC" or "IEC" in the key word search for more info.



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information of interest to members of the electrotechnical community.

DISCLAIMER

The opinions expressed by the authors are theirs alone and do not necessarily reflect the opinions of the USNC/IEC.

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