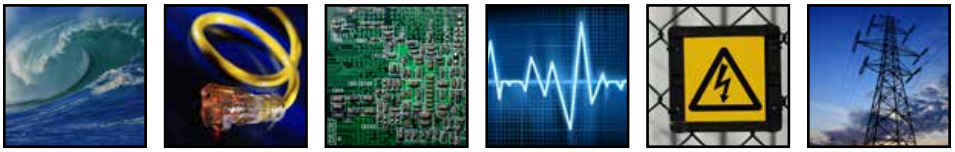
United States National Committee of the IEC

News and Notes



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FOCUS ON: Multimedia

Nearly every aspect of modern life is now connected to some form of technology-based media. And increasingly, those connections include multiple technologies that work together to bring us the information, communicaiton access, services, and entertainment we count on. As these interconnected technologies continue to evolve at a rapid pace, multimedia standards provide the critically important frameworks that enable their interoperability, efficacy, quality, and safety around the world.

IEC TC 100: Keeping Up with the Needs of the Multimedia Market

By Alayne Bell, Manager, Technology and Standards, Consumer Electronics Association (CEA); IEC TC 100

From Blu-ray players, flat screens, digital televisions, and color scanners and printers, to the internet itself, the digital revolution has truly changed our world. Multiple media has existed for some time, and today we still watch TV, read newspapers and books, listen to the radio, and go to the cinema. But more and more we find our sources of information and entertainment combined into what everyone now calls multimedia. We read newspapers online, listen to the radio on our cellphone, and at home we watch movies on TV stored on the hard drive of our set-top boxes.

International standards from IEC Technical Committee (TC) 100, *Audio, video and multimedia systems and equipment,* make all the pieces of multimedia work together properly and ensure that the quality of it all is identical worldwide, no matter where you live and no matter where the equipment you're using was made. In such an environment, standards play an important role by ensuring interoperability. TC 100 is involved in consumer products ranging from digital video players to plasma and LCD technology to mobile communications.

A Responsive Committee

We have shifted from analog signal processing to digital signal processing for audio, visual, and multimedia systems and equipment, for both consumers and professionals. But the boundaries separating these two groups of users are diminishing. This phenomenon is particularly pronounced in multimedia technology. Due to digitization, many consumer products in the audio and video fields now have the same performance and quality that professional users require for their applications. In addition, digitization brings the ability to make copies indistinguishable from their sources, which leads to concerns about intellectual property rights.

(continued)

Published by the American National Standards Institute and its U.S. National Committee of the IEC

TC 100: Keeping Up with the Needs of the Multimedia Market (continued)

These are just some of the issues that TC 100 wrestles with as it creates standards for audio, video, and multimedia systems and equipment. The field is very broad and touches much of our daily lives. TC 100 prepares standards to ensure the best quality of recording, distribution, and reproduction of audio, video, and data signals, for the equipment and systems that have come to play such critical roles in our professional and personal lives.

The e-book market has seen tremendous growth, from 0.05% of all trade publishing revenues in 2002 to nearly 25% just ten years later. TC 100 standards for e-books are keeping up with that rapid development.

Current Needs in Multimedia

Defined as the integration of any form of audio, video, graphics, data, and telecommunication, multimedia represents a core part of the TC 100 charter. The committee has produced standards intended to address many of the changing needs of devices incorporating multimedia systems, from IEC 61966-12-2 Ed. 1.0, which addresses color management and measurement in multimedia systems, to IEC/TS 62045-1 Ed 1.0, which provides guidelines for the protection of the user's privacy in consumer equipment and systems.

TC 100 tries to address the many needs of the multimedia marketplace. At the same time, monitoring the current trends in multimedia devices helps to identify other emerging areas for standardization.

Some of the most interesting projects currently under development by TC 100's working groups, known as Technical Areas (TAs), include the following:

Cable networks for television signals, sound signals and interactive services, managed by TA 5

This group is developing standards and other publications related to cable networks, including,equipment and associated methods of measurement for headend reception, processing and distribution of television and sound signals, and processing, interfacing, and transmitting all kinds of data signals for interactive services.

Methods of measurement for the power consumption of audio, video, and related equipment, managed by TA 12

This group is developing standards and other publications for AV energy efficiency and smart grid applications. Energy consumption measurements are detailed for high interest product categories including, televisions, video recording equipment, cable set top boxes, and audio equipment. In the future, the group may consider standardizing methods of measurement of energy consumption of computer monitors.

Guidelines for synchronization of audio and video, managed by TA 11

This group is developing standards and other publications for the user's quality of experience relevant to audio, video, and multimedia systems and equipment. The group focuses on measurement methods, guidelines and solutions that provide the users with a high-quality experience.

Multimedia e-publishing and e-books – generic format for e-publishing, managed by TA 10

This group is developing standards and other publications related formats of multimedia e-book content, minimum requirements for multimedia e-book players, user interfaces for multimedia e-book players, e-publishing services, and guidelines for e-book distribution by interchangeable storage media.

Digital Living Network Alliance (DLNA) home network device interoperability guidelines, managed by TA9

This group is developing standards and other publications for the requirements, functions and protocols of audio, video and multimedia applications for end-user networks, as well as specifications addressing the total system connected in the network for this purpose. The scope includes system interfaces, application programming interfaces, modeling for the system structure, system functionality specifications and services provided by protocol processors. End-user networks include all personal networks such as home networks, vehicular networks and other networks controlled by an individual for audio, video and multimedia applications.

Universal Serial Bus (USB) interfaces for data and power, managed by TA14

This group is developing standards *(continued)*

TC 100: Keeping Up with the Needs of the Multimedia Market (continued)

and other publications for the interfaces and methods of measurement used with personal computing systems, equipment, and related multimedia products. These publications include specifications and requirements for power and control interfaces, methods of measurement for power consumption and energy efficiency, and interoperability with other systems and equipment.

Trends on the Horizon

One of the most common applications of multimedia can be found in smartphones. According to research from the Consumer Electronics Association (CEA), the past several years have seen incredible growth in the U.S. market. Already a multimillion dollar industry, smartphone shipments increased 14 percent in 2013 over 2012. An additional 10 percent increase is anticipated in 2014. From Android-based to Windows-based platforms, the smartphone is reaching nearly every American household, and should be of key interest to the standards industry.

Smart televisions, also known as connected TVs, are becoming more common in American homes. This year, the smart television market has experienced 34 percent growth over sales in 2012. This trend is likely to fall off in 2014, but an additional 12 percent growth is nonetheless anticipated.

While multimedia systems and technologies have become more ubiquitous, not all product categories have experienced growth. The increasing integration of multiple functions into one device has led to some standalone products experiencing a downturn in sales. For example, the sales of non-Blu-ray DVD players has fallen nearly 30% in comparison to last year. Sales of camcorders, once a staple of the American home, have decreased by more than 40 percent this year, with an additional drop in sales anticipated for next year.

In light of these recent trends, TC100 has approved the publication of several standards within the past year to address multimedia in the marketplace, including the following:

- **IEC 61938, *Multimedia systems – Guide to the recommended characteristics of analogue interfaces to achieve interoperability:*** This standard gives guidance on current practice for the characteristics of multimedia analogue interfaces to achieve interoperability between equipment from different manufacturers.
- **IEC 62224, *Multimedia home server systems – Conceptual model for digital rights management:*** This technical specification explains the conceptual model of the protocol specification to exchange license information between digital rights management (DRM) modules. The document also outlines which models should be defined as standard models as well as the standard meanings (mainly from the viewpoint of information security in the environment, including home server systems).
- **IEC 62227, *Multimedia home server systems – Digital rights permission code:*** This standard defines the permission code, a set of permission-related information in short code form, primarily intended for home server systems.

Smart televisions, also known as connected TVs, are becoming more and more common in American homes. This year the smart TV market experienced 34 percent growth over sales in 2012.

Other key topics on TC 100's radar for the near future include wireless power transmission, ambient assisted living (AAL), qualification methods for greenhouse gas emissions of computers and monitors, and multimedia car systems and equipment.

It is clear that multimedia electronics are pervasive and dynamic, with products and markets constantly evolving. The challenge for TC 100 is to remain one step ahead of the market in order to ensure the ultimate goals of increasing sales and satisfying consumers.

Further information

For more information about IEC TC 100's activities and its documents under development, visit http://tc100.iec.ch/index_tc100.html. ■

FOCUS ON: MULTIMEDIA

TC 110, *Electronic Display Devices,* Evolves with a Dynamic Industry

By James E. Matthews III, IEC Vice-President and SMB Chairman

As multimedia devices and applications have rapidly evolved, so have the committees that develop the relevant International Standards. IEC Technical Committee (TC) 110 was originally formed as TC 110, *Flat panel displays,* in 2003. The committee grew out of TC 47 on semiconductor devices when technologies for video displays began to evolve from conventional cathode ray tube (CRT) technology to new flat panel display technologies.

At first, TC 110 work was organized among three principal display technology areas: plasma displays, liquid crystal displays (LCDs), and organic light emitting diode (OLED) displays. This served the industry well through the rapid adoption of the new, larger sized displays used mainly in home television sets.

But with the rapid convergence of information technology and consumer electronics, the field broadened considerably, and flat panel displays took on full service as monitors, television, communications, and more. New devices and applications including tablet devices, handheld devices, and even large format public displays have resulted in continued evolution of this TC. Many new working groups and project teams have been added to keep up with the technology revolution still in progress.

TC 110 recently changed its name to *Electronic display devices,* to better reflect the broader nature of its work. Current TC 110 Working Groups (WGs), Maintenance Teams (MTs), and Ad-hoc Groups (AHGs) include:

- WG 2, *Liquid crystal display devices*, which was expanded to include handheld devices)
- WG 4, *Plasma display panels*
- WG 5, *Organic light emitting diode displays (OLED)*
- WG 6, *3D Display Devices (3DDD),* for displays that produce visual 3D sensation
- WG 7, *Electronic paper displays (EPD)*, for e-paper including in displays for things like e-readers
- WG 6, *Flexible display devices (FDD)*, including thin displays that can flex and bend
- MT 62595, *LCD backlight unit,* addressing technologies used to backlight LCD displays
- AHG 9, *Touch screen panel,* addressing technologies to capture human touch on displays
- AHG 11, *Laser display devices,* addressing projected laser driven displays

Technology has come full circle. While the original flat panel display work was spawned from the CRT displays, the scope of TC 110 excluded this type of display. However, the IEC Standardization Management Board (SMB) shut down TC 39 on vacuum tubes and displays and asked TC 110 to take over maintenance of these legacy documents. As a result, TC 110 now manages all displays, including the original work from where it originally evolved.

Looking to the future, it will be interesting to see how TC 110 continues to change, since the types and technologies of displays are still evolving in this ever changing and converging world of multimedia. ■

With the rapid convergence of information technology and consumer electronics, flat panel displays took on full service as monitors, television, communications, and more.

James E. Matthews III

Jim Matthews, director of technical standards and standards policy at Corning Incorporated, has served as chairman of the IEC Standardization Management Board (SMB) and IEC Vice-President since January 2011. He previously served as president of the USNC.

UPDATES FROM THE TCS

IEC TR 62655: A New Guide to High-Voltage Fuses

By John G. Leach, Ph.D., Technical Advisor, IEC SC 32A; Secretary, IEC SC 32A, WG 6

Can there be anything new associated with fuses, one might ask? Well, while it is true that they have been around for a very long time – and while I must admit that if you time-traveled back a hundred years or so and looked at an electrical installation, the cylindrical fuses may not appear so very different from those of today – the world has been changing, even for devices with such a long pedigree. While a cylinder is still a cylinder, what goes on inside a fuse is significantly more complex that most folks (even engineers) realize. This common lack of understanding is the driving force behind the production of IEC Technical Report (TR) 62655, *Tutorial and application guide for high-voltage fuses,* by IEC Subcommittee (SC) 32A, *High-voltage fuses,* Working Group (WG) 6.

There are perhaps two significant aspects to this new report. The first is that it consolidates information that was previously scattered across half a dozen other standards and TRs (not to mention the literature of numerous manufacturers), making it much easier for engineers to get the information they need. The second is the inclusion of "tutorial" in the title, which indicates this is not your father's application guide. Producing a work that is, in part, a "teaching document" is something of a departure from traditional (fuse) standards, but represents a significant and needed trend in our industry.

It may be observed that very seldom do fuses not work correctly, but that does not mean that they always work as was intended and desired. In my experience, failures that involve fuses nearly always involve some aspect of misapplication. As the pool of engineers with a thorough knowledge of fuses shrinks (and with business consolidation this includes fuse design engineers as well as fuse users), the need for officially recognized advice grows more important. If we want our industry to thrive, we must ensure products are chosen correctly, applied appropriately, and maintained effectively. This is what we are trying to achieve with the publication of this Technical Report. Even if we only convince someone that they do not know as much about fuses as they thought they did, leading to them asking a question of the manufacturer, we will have achieved some of our purpose!

So, how did the TR come about, and what does it contain? A little history is called for.

Setting the Stage

One of the inspirations for TR 62655 came from work done in standards about 20 years ago concerning "full-range" current-limiting fuses. Current-limiting (CL) fuses are great at interrupting very high currents, acting so fast that the first peak of a fault current is not reached (hence their name). However, their ability to clear lower currents depends very much on their design, and different classes exist based on how low a current they can interrupt (e.g., from close to their rated current up to as much as 10 times their rated current).

Fuses suitable for clearing only relatively high currents are termed "back-up" fuses, as they are normally used with another device (typically a switch in European practice and an expulsion fuse in North America). Fuses that could interrupt very low currents were termed "general-purpose," and appropriate testing was devised. As fuse technology advanced in the second half of the 20th century, however, the testing required to demonstrate "general-purpose" capability became insufficient for some fuse designs and applications. A new classification of "full-range" fuses was therefore introduced (that is, a fuse that can interrupt any current that causes it to melt, up to a maximum surrounding temperature specified by the manufacturer).

While fuses may appear simple from the outside, the complex functioning inside is anything but, and most people don't have a real understanding of today's models.

Appropriate testing was devised. While this testing was being developed by IEC and IEEE fuse standards groups, an IEEE survey of users showed widespread confusion as to the exact capability of each type of fuse. In fact in one question, it was found that almost 60% of those surveyed did not know that the lowest current a back-up fuse has been shown to interrupt is the value marked on the fuse! If such a fuse melts at a lower current, it is very likely that it could not interrupt that current on its own. What was most disturbing was that most of those surveyed had jobs that required them to specify fuses.

As a result of concerns coming from the survey, IEEE developed a tutorial that explained how fuses worked and how current-limiting fuses *(continued)*

A New Guide to High Voltage Fuses (continued)

IEC TR 62655 represents the first attempt to collect the combined wisdom of many fuse experts in the area of fuse application for future generations.

are applied. This went beyond the usual standard "application guide."

This tutorial document was well received; in addition to being given as an actual tutorial several times, it was published as IEEE Std C37.48.1, which ensured that it would be kept up to date. Comments from utility engineers were along the lines of, "With reductions in personnel, and the retirement of experienced engineers, this type of document is very valuable to maintain the knowledge base."

The IEEE tutorial, however, was generally limited to current-limiting fuse applications that are common in North American–type power systems (existing IEC fuse standards covered primarily European applications and did not address most North American concerns). Almost everywhere (except in a few European countries), expulsion type fuses are very common, and there tends to be different types of application for CL fuses following either European or North American practice. IEC SC 32A, *High Voltage Fuses,* felt that a similar document to the IEEE tutorial could be developed by IEC that would attempt to cover all of the common application methods used in the world, with both current-limiting and expulsion fuses.

Collaboration Pays Off

Developing the Technical Report proved to be a herculean task. Application data from five IEC fuse standards and TRs was combined with information from the IEEE tutorial document, material appearing in various manufacturer's literature, and significant amounts of new material, to produce the approximately 130 page report. It required cooperation between the IEEE and IEC on copyright issues – frankly, not always the easiest thing to achieve – and kudos is due to the management of both IEEE and IEC that the best interests of users were served by their ultimate cooperation.

After an introduction explaining the aims and objectives of the report and its content, and sections on scope and references, the document is divided into two parts. The first part contains primarily "tutorial" information – that is, explanations of how fuses work, fuse classifications, and common terms in use. Descriptions of the most common types of fuses are given, including fuses recognized in present standards, as well as types that are in common use but are, perhaps surprisingly, not presently covered by standards.

The second and larger part covers application information. This is divided into information common to most applications, and then information specific to certain widespread applications. After additional information related to operation, maintenance and replacement of fuses is given, there is an annex that provides de-rating information for fuses in enclosures – something very common today, but not so common when fuse standards were originally developed. It may be noted that standards for testing are still somewhat "catching up" with some of these newer applications, emphasizing the need for care during the fuse application process to avoid problems.

If one has the fortitude to read from the first to the last page, this Technical Report will provide an in-depth study of high-voltage fuses and their applications. However, it is suspected that few users will read the report in this way, but rather read the appropriate sections covering fuses and applications for which they require information.

A Tremendous Resource

IEC TR 62655, *Tutorial and application guide for high-voltage fuses,* represents something quite new for the high-voltage fuse community: the first attempt to collect the combined wisdom of many fuse experts in the area of fuse application for future generations (and in fact, some of the participants are now retired, and so without this effort some of their experience would have been lost).

Designing and testing a new product is only half of the story; if it is not applied correctly, no amount of work on the testing standards will help the user achieve their desired result. While the manufacturer's literature is always the ultimate authority on application information, many manufacturers want their recommendations to carry the weight of consensus among experts, and this was another motivation for this report.

If you have any interest in or work involving high-voltage fuses, I urge you to purchase this Technical Report – I anticipate you will not be disappointed!

Dr. John Leach

Dr. John G. Leach serves as the Technical Advisor (TA) for IEC SC 32A and Secretary of SC3 2A, WG6, the group that developed IEC Technical Report (TR) 62655 on high-voltage fuses. Dr. Leach has a Ph.D. in electirical engineering from the University of Nottingham in the United Kingdom.

Further information

To purchase IEC Technical Report 62655, *Tutorial and application guide for high-voltage fuses,* visit the ANSI Webstore. ■

IEC TC 120, *Electrical Energy Storage Systems:* Starting Off on a Charging Pace

By Ryan Franks, U.S. TAG Secretary, IEC TC 120, and Dr. Vilayanur Viswanathan, Ph.D., U.S. Technical Advisor, IEC TC 120

Considering the increasing demands for renewable energy as well as a reliable and resilient electricity supply, especially in Smart Grid domains, electrical energy storage systems will play indispensable roles to efficiently and effectively meet market needs. Appropriate international standardization of electrical energy storage systems will not only provide markets with affordable solutions, but also help every country to increase the use of practical technologies in order to integrate more renewable energy and to realize a smarter supply of electricity.

IEC Technical Committee (TC) 120, *Electrical Energy Storage (EES) Systems,* is tasked with developing standardization in the field of grid-integrated storage implementing system approaches to understand their complex constructions. There is currently no organization internationally that is responsible for standards of entire energy storage systems, which are composed of many components. While energy storage technologies are achieving maturity, the industry remains relatively young. Recent energy storage deployments worldwide have highlighted several areas that need more attention from manufacturers, testing labs, utilities, inspectors, and integrators. Standardization in this field is crucial to decreasing investor risk, establishing common testing and reporting methods, and ultimately increasing adoption of the technology.

International Plenary Meetings

The first plenary meeting of IEC TC 120, held July 10-11 in Tokyo, has started the IEC's newest TC off on the right foot. Over 45 energy storage professionals from China, Japan, Italy, the U.S., Germany, South Korea, and France gathered at the Japanese Electrical Manufacturers Association (JEMA) to discuss the organization of the group and successfully finalized the scope and other procedural issues. It was clear from the discussions that ensued that the passion and knowledge of the group will make this a very active and successful working body.

The U.S. delegation was comprised of:

- Dr. Vilayanur Viswanathan, Pacific Northwest National Laboratory; U.S. Technical Advisor (TA), IEC TC 120
- Ryan Franks, NEMA; U.S. Technical Advisory Group (TAG) Secretary, IEC TC 120
- Rabah Rennane, S&C Electric Company
- Laurie Florence, UL LLC
- Mike Stelts, Panasonic North America

Each delegation gave a presentation on the state of energy storage from their country. The U.S. presentation, given by Mr. Franks and Dr. Viswanathan, focused on standards development activity in the U.S., highlighting the Department of Energy (DOE)–sponsored energy storage system performance protocol. The protocol was developed by a team of over 100 committee members led by Pacific Northwest National Laboratory–Sandia National Laboratory.

This overview was very well received, with many follow-up inquiries made by the audience to find out more information about U.S. standardization efforts. Specifically, the IEC committee is considering adopting the performance protocol language during standards development.

The second plenary meeting will be held in Frankfurt, Germany, December 11-12, and will be focused on finalizing the working group structure based on upon input on priority projects and liaison with other IEC and International Organization for Standardization (ISO) groups. The third plenary meeting will then take place in either the U.S. or Italy in March 2014.

The goal of the second plenary meeting is, first, to establish formal liaisons and engage in an exchange of information with the following IEC committees, as agreed to at the first plenary meeting:

The aim of IEC TC 120 is to accelerate the integration of renewable energy into the grid and to enable a more reliable and efficient supply of electrical energy.

- TC 8, *System Aspects for Electrical Energy Supply*
- TC 21, *Secondary Cells and Batteries*
- SC 21A, *Secondary Cells and Batteries Containing Alkaline or other Non-Acid Electrolytes*
- TC 22, *Power Electronic Systems and Equipment*
- TC 57, *Power Systems Management and Associated Information Exchange*

Secondly, based upon requested input from the participating (P)-member National Committees (NCs), the organizational structure of the TC will be decided. The IEC TC 120 leadership has proposed the following sub-groups to date:

- Working Group (WG) 1 – Terminology
- Project Team (PT) 1 – System TC, Gap Analysis, etc.

(continued)

IEC TC 120, Electrical Energy Storage Systems, Starting off on a Charging Pace (continued)

- WG 2 – Parameters, Testing Methods
- WG 3 – Planning and Installation of EES Systems
- WG 4 – Safety and Environmental Issues

U.S. TAG Operations

In October 2012, NEMA was selected to hold the Secretariat of the U.S. TAG to IEC TC 120, and was able to quickly develop a deep list of vertical participants in the industry to readily form the TAG in parallel with domestic energy storage standardization efforts. This Technical Committee is one of the first to take a systems approach to standardization in the IEC, and the U.S. TAG has attracted interest and participation not only from manufacturers, but also users, testing labs, and other industry stakeholders. There are now over 40 individuals participating in the TAG.

On March 28, 2013, over 30 U.S. energy storage industry experts gathered in Rosslyn, Virginia, for the first face-to-face meeting of the U.S. TAG. Many of the TAG members are first time IEC participants. In order to ensure their successful start, Tony Zertuche attended and provided an introduction to the TAG on the structure of the USNC and IEC as well as their procedures. The attendance of five members of international TC leadership from Japan and their presentation on the preliminary thoughts and scope of the committee cemented the importance of the meeting. The Secretary of IEC TC120, Dr. Hideki Hayashi, expressed to the group that they had made the trip because US participation was critical to the committee having success on the international stage. This initial meeting facilitated an excellent working relationship between the U.S. TAG and the TC leadership that continues through today.

The level of engagement of the U.S. TAG is very high and we are very motivated by the robust and respectful discussions and debates that have already happened and are posed to continue to occur. There is no doubt that the US will be leader of and frequent contributor to developments in IEC TC 120, in no small part thanks to the knowledge base represented by the TAG members.

Further information

Learn more about the creation and activities of IEC TC 120 at www.iec.ch/etech/2012/etech_1112/tc-3.htm. ■

Ryan Franks

Ryan Franks, program manager (technical) at NEMA, oversees the development and maintenance of manufacturing and performance standards and other technical documents. A trained engineer, Mr. Franks has served as Secretariat for IEC committees, American National Standards Institute (ANSI)-accredited standards committees, tri-national CANENA committees, and NEMA committees. He serves as the U.S. TAG Secretaty for IEC TC 120.

Vish Viswanathan

Vilayanur Viswanathan, Ph.D., of the Pacific Northwest National Laboratory's Applied Materials Sciences division has over 15 years experience in energy storage and fuel cell systems R&D. Energy storage work includes state of health (SOH) determination, battery sizing, electrode design to optimize power vs. energy, safety analysis, and design/development of Li-Ion, Na-S and redox flow batteries for stationary use. He serves as the U.S. Technical Advisor for IEC TC 120.

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IEC Online IT Tools and Applications

White Paper – "Grid Integration of Large-Capacity Renewable Energy Sources and Use of Large-Capacity Electrical Energy Storage"

Guide to IEC/IEEE Cooperation

IT'S AWARDS SEASON!

Five USNC Professionals Honored at the 2013 ANSI Leadership and Service Awards

The American National Standards Institute (ANSI) honored seventeen leaders of the U.S. and global voluntary standards and conformity assessment community on October 2 at the 2013 ANSI Awards Banquet and Ceremony. Held annually, the leadership and service awards program is a long-standing tradition that recognizes and honors creativity, dedication, and vision in the field of standards and conformity assessment. The awards dinner took place at the Newseum's Knight Conference Center in Washington, DC, during ANSI's World Standards Week celebration.

The seventeen 2013 ANSI Awards winners and their accompaniers

The USNC was well represented by five winners:

Lawrence Farr, principal engineer at the Eaton Corporation, was awarded the Elihu Thomson Electrotechnology Medal, which honors an individual who has contributed in an exceptional, dedicated way to the field of electrotechnology standardization, conformity assessment, and related activities at the national and international levels.

Manyphay Souvannarath, senior systems engineer at General Electric (GE) Corporation, received the Next Generation Award, which honors those who have been engaged in standardization or conformity assessment activities for less than eight years and who have, during this time, demonstrated vision, leadership, dedication, and significant contributions to their chosen field of activity.

The following three USNC professionals received the Meritorious Service Award in recognition of their outstanding contributions to the U.S. voluntary standardization system. Each one helped the USNC and ANSI attain the objectives for which it was founded.

Mark W. Earley, P.E., chief electrical engineer for NFPA

Edward F. Mikoski, Jr., CStd, vice president of EIA standards and technology at the Electronic Components Industry Association (ECIA)

Alvin Scolnik, vice president, technical services (retired) for the National Electrical Manufacturers Association (NEMA)

We congratulate these outstanding individuals on their accomplishments in the standards and conformity assessment industry.

Further information

The ANSI Awards nomination period opens in early spring each year. For more information, visit www.ansi.org/awards. ■

We Have a Winner! USNC Newsletter Naming Contest Results

And the winner is..... *the USNC Current!*

The USNC received a large number of terrific submissions for proposed new names for the *USNC News & Notes,* and would like to thank all the entrants for their time and creativity. After much deliberation by the panel of judges, *USNC Current* was selected as the name that best captures the innovative work in electrotechnology standardization performed by thousands of USNC members and constituents every day.

Beginning with our next issue (Winter 2013), the USNC newsletter will officially be christened as the *USNC Current,* and will sport an updated design to reflect the importance and impact of its cutting-edge content.

Look for the new *USNC Current* in Winter 2013!

IT'S AWARDS SEASON!

USNC Wins Big with IEC 1906 Awards

The IEC 1906 Award for 2013 has been conferred upon 38 USNC experts who have contributed in an exceptional way to the technical work of IEC.

The aim of the Award is to recognize current achievement(s) that can be considered a major contribution to furthering the interest of electrotechnology standardization and related activities. Specifically, the award must be granted for exceptional, recent contribution to work related to the development-either technical or from an organizational point of view-of a specific work project.

The following USNC experts have received 1906 Awards for 2013:

Sprague Ackley, Intermec; ISO/IEC Joint Technical Committee (JTC) 1

Margaret Goodrich, Sisco; IEC Technical Committee (TC) 57

David Arnett, Hewlett Packard; International Special Committee on Radio Interference (CISPR)

Ernst Grunewald, Whirlpool; IEC TC 59

David Blevins, Northrup Grumman; IEC TC 80

Anthony H Hardaway, Whirlpool; IEC TC 59

Dan Brake, Nextera Energy; IEC TC 88

Philip Hopkinson, Hvolt Inc.; IEC TC 14

Edward M. Briesch, UL; IEC TC 31

Kurt Hunter, Siemens; IEC TC 57

Lynn Davis, Ph.D.; RTI International; IEC TC 113

Dieter Jundt, Crystal Technology LLC; IEC TC 49

Edward Dobrowolski, NERC; IEC TC 57

Sriraman Kannan, Ph.D., Bell Labs, Alcatel-Lucent; IEC TC 86

Jeff Eggleston, Covidien; IEC TC 62

Jamshed Namdar Khan, Avago Technologies; IEC TC 47

Jeff Eby, Eby Energy Products, Inc.; IEC TC 18

Mark King, Cisco; IEC TC 77

Antonio Faraone, Ph.D., Motorola Solutions Inc.; IEC TC 106

John R. Kovacik, UL, IEC TC 17

Elaina Finger, Corning Incorporated; IEC TC86

Milena Krasich, Raytheon; IEC TC 56

Further information

Visit www.iec.ch/about/awards/1906/. ■

Congratulations to Sonya Bird of IEC TC 61!

The IEC Thomas A. Edison Award is intended to reward Technical Committee (TC) or Subcommittee (SC) officers (Chairman, Secretary, or Assistant Secretary) for exceptional current achievement (within the past five years) in the management of their committees. When created, it was hoped that the granting of the IEC Thomas A. Edison Award would also stimulate outstanding achievement and perhaps encourage companies to allocate more time and human resources to the IEC's work.

This year, the Edison Awards was presented to the USNC's Sonya Bird, Secretary of IEC TC 61, *Safety of household and similar electrical appliances*. Ms. Bird is the Program Manager - International Standards at UL. Among her long list of contributions in regional and international forums, she chaired the USNC Technical Management Committee (TMC) Task Force on the Model Operating Procedures, and successfully brought it to conclusion.

A maximum of nine Edison Awards per year may be granted by the IEC. This year, Ms. Bird is one of only five winners of the prestigious award. Nice job, Sonya!

Further information

Visit www.iec.ch/about/awards/thomasedison/. ■

LAUGH TRACK

THE STANDARDIZATION WORLD

Experts to Discuss Standardization Priorities for Smart and Sustainable Cities at November ANSI Workshop

On November 21, leading experts from industry, government, and academia will join representatives of the standardization community for a workshop discussion of priorities in the area of smart and sustainable cities. The event will be hosted by the American National Standards Institute (ANSI) at the Ronald Reagan Building and International Trade Center in Washington, DC.

Several USNC leaders and experts will be among the lineup of distinguished speakers, to include:

- James E. Matthews III, director, technical standards and standards policy, Corning, on the formation of an IEC systems evaluation group on smart cities;
- Franz Zichy, electronic engineer, U.S. State Department, on the activities of an International Telecommunication Union (ITU) focus group on smart sustainable cities;
- Manyphay Souvannarath, senior systems analyst, GE Energy, on the application of model based systems engineering;
- Alex Tarpinian, manager, open source and standards policy, IBM, on the outcome of upcoming discussions in International Organization for Standardization (ISO) /IEC Joint Technical Committee (JTC) 1, *Information technology,* regarding a proposal from China to form a study group on smart cities;
- James T. Pauley, senior vice president, external affairs and government relations, Schneider Electric, presiding over a panel on innovation;
- Ron Baker, distinguished engineer and chief architect for smarter cities & operations, IBM, on the IBM intelligent operations center;
- Leah Guzowski, energy policy specialist, Argonne National Laboratory, on computational modeling in urban design;
- Dr. Albert Hövel, head of technical department, the German Institute for Standardization (DIN), on European work on smart cities;
- Dr. John Kulik, Siemens Corporation, corporate technology, moderating a discussion of smart cities initiatives;
- Anthony Pellegrini, director and head of infrastructure and urban development practice, Centennial Group, on the challenges facing developing countries.

In addition to expert presentations, the workshop will include interactive discussions, including breakout sessions, to hone in on the key areas where standards and conformance solutions can help cities to become cleaner, greener, more sustainable, and more resilient.

Advance registration for the workshop is required and includes all materials, continental breakfast, networking breaks, lunch, and an evening reception.

Further information

To register for the workshop, or for additional details regarding the agenda, sponsorship, or exhibitor opportunities, visit www.ansi.org/events or email jmccabe@ansi.org. ■

THE STANDARDIZATION WORLD

Rural Electrification Support for Developing Countries*

To help bring electrical energy to some of the 1.3 billion people without access or with only limited energy access, the IEC, World Bank Group, and United Nations Foundation have announced a cooperative agreement to provide developing countries with access to important technical documents that support rural electrification.

The IEC Technical Specification 62257 series, *Recommendations for small renewable energy and hybrid systems for rural electrification,* outlines international best practice solutions to support energy access in developing countries across a range of technologies. The three organizations are cooperating to offer discounts to qualified stakeholders purchasing documents in this series.

Electrification is one of the key drivers facilitating economic and socio-cultural development. While it is easier to connect cities to the electric grid, rural areas are often too remote. In developing countries renewable energy off-grid applications are often the most suitable for rural electrification. This often means decentralized solutions such as individual electricity generation systems covering basic energy needs or minigrids – larger systems providing electricity to several households.

When developing countries use internationally recognized technical specifications it allows them to secure long-term sustainability of their investments, as well as interoperability and safety of the products they are installing. It also helps to ensure that their investments will be worthwhile and that components will work together as they should, when they should. In offering this package, the IEC has responded positively to a request from the UN Foundation to have the IEC 62257 technical specifications more easily available to key stakeholders in developing countries. ■

*Originally published in *IEC News & Views*

THE STANDARDIZATION WORLD

ANSI Webstore Purchases Support USNC

Standards developed by IEC can be purchased from a variety of sellers. 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. 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.

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 one-stop 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). ■

Upcoming Issues of the USNC Newsletter

Q IV, Winter 2013 **Highlights of IEC SMB Strategic Groups**

Don't forget to look for the new name and design – ***the USNC Current!***

SAVE THE DATES

Mark Your Calendar! Upcoming Meetings & Events

2013

77th IEC General Meeting,
October 21–25, New Delhi, India

IEC Directives Maintenance Team
ISO/IEC Joint Directives Maintenance Team,
December 3–4, ANSI New York Office

2014

CAPCC/TMC/Council, January 21–23,
Small Business Development Center,
Central Arizona College, Casa Grande, AZ

SMB Meeting, February 18, Geneva

IEC Advisory Committee on Electricity Transmission and Distribution (ACTAD), March 13–14, ANSI New York Office

COPANT General Assembly, April 21–25, Havana, Cuba

U.S. Science/Engineering Festival – Exhibit, April 25-27, Washington, DC

CAPCC/TMC/Council, April 29–May 1, Rockwell Automation, Mayfield Heights (Cleveland), OH

PASC, May 5–9, Malaysia (tentative)

CAB Meeting, June 16, Geneva

SMB Meeting, June 17, Frankfurt

CB Meeting, June 18, Geneva

78th IEC General Meeting, Tokyo, Japan, November 10–14

For more event information, visit www.ansi.org/calendar and enter "USNC" or "IEC" in the key word search field.

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