



Technical Standards Program

ESTA Standards Watch

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Five ESTA standards in public review

Five standard and draft standards are posted for public review on the ESTA website at <http://estalink.us/pr>. People materially affected by these standards or proposed standards are invited to visit the website and comment on them before the comment due dates noted. In order of due-date and then alpha-numeric designation, the documents are:

BSR E1.4-2, Entertainment Technology - Statically Suspended Rigging Systems, is a new draft standard for statically suspended rigging systems (dead-hung battens and grids) permanently installed in performances spaces, places of assembly, and other areas used for entertainment purposes. It establishes minimum performance criteria, recommendations and guidelines that can be used for installation, use, maintenance and inspection purposes. Comments are due before the end of the day 17 June 2019.

ANSI E1.27-2 -- 2009 (R2014), Entertainment Technology -- Recommended Practice for Permanently Installed Control Cables for Use with DMX512-A Products, is an existing standard being considered for reaffirmation. It's the second part of a two-part standard for DMX512 cabling, and is for permanently installed cables. The first part, ANSI E1.27-1, is for portable control cables. Comments are due no later than 1 July 2019.

ANSI E1.30-3 -- 2009 (R2014), EPI 25 Time Reference in ACN Systems Using SNTP and NTP, is another existing standard being considered for reaffirmation. It's another recipe in the E1.30 cookbook for ACN. It offers ways of providing a time reference so events can be synchronized. Comments are due no later than 1 July 2019.

ANSI E1.30-10 -- 2009 (R2014), EPI 32, Identification of Draft Device Description Language Modules, is another existing standard being considered for reaffirmation. It recommends way of identifying a Device Description Language Module for ACN as a trial version, one under development, not for release yet. ANSI E1.30-10 is part of an open series of E1.30 documents that suggests ways of doing common tasks with ANSI E1.17, Architecture for Control Networks. Comments are due no later than 1 July 2019.

BSR E1.59, Entertainment Technology--Object Transform Protocol (OTP), is a new draft standard describing a mechanism to transfer object transform information such as position, orientation and velocity over an IP network using a subset of the [ACN] protocol suite. It covers data format, data protocol, data addressing, and network management. Data transmitted is intended to coordinate visual and audio elements of a production and should not be used for safety critical applications. The document's authors are anxious to get some public review response on the document. Please respond with "Yes" if the draft is acceptable; responses need not be limited to objections. Comments are due no later than 1 July 2019.

Three more ESTA standards approved

On May 21, ANSI's Board of Standards Review approved ANSI E1.30-11-2019, EPI 33 - ACN Root Layer Protocol Operation on TCP, a new standard. Two days later, the Board of Standards Review approved ANSI E1.37-7-2019, Additional Message Sets for ANSI E1.20 (RDM) - Gateway & Splitter Messages, another new standard, and ANSI E1.44-2014 (R2019), Common Show File Exchange Format for Entertainment Industry Automation Control Systems - Stage Machinery, a reaffirmation of ANSI E1.44-2014. Look for them to be published soon and available for free download from the ESTA website, thanks to the sponsorship of ProSight Specialty Insurance, and to be available for sale on the ANSI and IHS websites.

ESTA Plugfest announces free RDMnet webinar

An "Introduction to RDMnet" will be broadcast live on Sunday 21 July from 7:00 p.m. to 8:30 p.m., CDT. Officially known as E1.33, RDMnet was recently approved by ESTA's Control Protocols Working Group (CPWG) as a consensus standard and is now on track to obtain approval by the American National Standards Institute this summer. RDMnet extends the functionality of RDM to Ethernet networks. Expect to see products with RDMnet features to begin to appear at trade shows later this year.

This lively, educational webinar will illustrate the challenges solved by RDMnet as well as explain how it works from both a user perspective and within the protocol itself. The recommended best practices approach in implementation for developers also will be discussed. Attendees will have the opportunity to ask questions of the CPWG subject matter members that authored this standard.

Registration for this webinar may be made by sending an email to plugfest@esta.org. Instructions for logging in will be emailed to all pre-registered attendees a few days before the live broadcast. Qualified attendees may also receive 0.5 ETCP renewal credit for each session hour.

This webinar is being held in conjunction with the ESTA Control Protocols Plugfest. ESTA's Plugfest is an opportunity to connect your lighting products with those of other manufacturers to test and resolve network compatibility challenges. Attendees bring controllers, intelligent lights, control protocol analyzers, and other network-connected components. People attend from around the world to pursue improvement of their customers' product experiences. The scheduled Plugfest hours are 9:00 a.m. to 11:00 p.m. Friday thru Sunday at the D/FW Marriott Solana in Westlake,

More event information is available at <http://estalink.us/plugfest>, or contact the event organizers at Plugfest@esta.org.

ANSI seeks comments on proposed ISO Technical Committee on sustainable processes for wood

The American National Standards Institute is encouraging its members and relevant stakeholders to submit comments on a proposed new ISO Technical Committee to develop standards on sustainable processes for wood and wood-based products ANSI's deadline for comments on the proposal (available on the ESTA website at <http://estalink.us/yjuhd>) is 28 June 2019.

ABNT, the national standards body for Brazil, submitted the proposal with the scope statement: "Standardization in the field of the wood and wood-based industries, including but not limited to sustainability and renewability aspects, chain of custody, timber tracking, and timber measurement, across the entire supply chain from biomass production to the finished wood and wood-based products."

ANSI invites all interested US parties to review the proposal and to submit comments to Steve Cornish, ANSI senior director of international policy, at scornish@ansi.org, by the close of business on 28 June 2019. Non-US parties should submit comments through their own representatives to the ISO.

Public review for Tentative Interim Amendments of the NEC

Public comments are being solicited on Tentative Interim Amendments to the National Electrical Code, NFPA 70, with a closing date of 27 June 2019. The TIAs listed here are among those most likely interest *Standards Watch* readers and are variously for the existing 2017 edition and the upcoming 2020 edition. These TIA are posted on the NFPA website under the "Current & Prior Editions" and "Next Edition" tabs for NFPA 70. Visit <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=70> Each TIA has a "submit a comment" email link.

Proposed Tentative Interim Amendment: Soliciting public comments: Proposed TIA No. 1426, Reference: 600.5(D)(2) in the 2020 edition.

1. Revise 600.5(D)(2) to read as follows:

600.5(D)(2) Enclosures as Pull Boxes. Neon t-Transformer enclosures shall be permitted to be used as pull or junction boxes for conductors supplying other adjacent signs, outline lighting systems, or floodlights that are part of a sign and shall be permitted to contain both branch and secondary circuit conductors, provided the sign disconnecting means de-energizes all current-carrying conductors in these enclosures.

Substantiation: The word "Neon" was lost during the First Revision and not noticed during the second revision until all the changes were reviewed after the panel meeting in San Diego. The lost word was noted in the chairs report and reported to staff.

Proposed Tentative Interim Amendment: Soliciting public comments: Proposed TIA No. 1438, Reference: 725.121(C) in the 2020 edition.

1. Revise 725.121(C) to read as follows:

725.121(C) Marking. The power sources for limited power circuits in 725.121(A)(3), limited power circuits for listed audio/video equipment, listed information technology equipment, listed communications equipment, and listed industrial equipment in 725.121(A)(4) shall have a label indicating the maximum voltage and maximum current or maximum voltage and nominal current output per conductor for each connection point on the power source. Where multiple connection points have the same rating, a single label shall be permitted to be used. For equipment with a rated current per conductor less than 0.3 amperes, the effective date shall be January 1, 2021.

Substantiation: CMP-3 removed this exemption in the First Revision for 2020: "Exception – Marking shall not be required for power sources providing 0.3 amperes nominal current or less per conductor." This imposes a new requirement on this equipment. Manufacturers will not be able to instantly comply and therefore, require time to make the appropriate changes to their equipment. The added text intentionally does not include equipment where the rated current exceeds 0.3A per conductor. This requirement was imposed in 2017 with an effective date of January 1, 2018. This equipment should already have this label and therefore is purposely excluded from coverage under this TIA.

Proposed Tentative Interim Amendment: Soliciting public comments: Proposed TIA No. 1444, Reference: 725.121(C) in the 2020 edition.

1. Revise 725.121(C) to read as follows:

725.121(C) Marking. The power sources for limited power circuits in 725.121(A)(3), limited power circuits for listed audio/video equipment, listed information technology equipment, listed communications equipment, and listed industrial equipment in 725.121(A)(4) shall have a label indicating the maximum voltage and rated current output per conductor for each connection point on the power source. Where multiple connection points have the same rating, a single label shall be permitted to be used.

Informational Note No. 1: Rated current for power sources covered in 725.144 is the output current per conductor the power source is designed to deliver to an operational load at normal operating conditions, as declared by the manufacturer.

Informational Note No. 2: An example of a label is “52V @ 0.433A, 57V MAX” for an IEEE 802.3 compliant Class 8 power source.

Substantiation: There is concern about how PoE systems will be inspected to comply with the NEC. A consistent label format will greatly ease the inspector burden, making it easy to confirm an install complies with 840.160 or 725.144 with a glance. This was overlooked by the CMP. Time is of the essence; if this isn't added to the 2020 code, waiting until 2023 will be too late. This timing issue is why this is being submitted as a TIA instead of waiting for the next revision cycle.

Proposed Tentative Interim Amendment: Soliciting public comments: Proposed TIA No. 1451, Reference: 240.67(C) and Informational Note (new) in the 2020 edition.

1. Revise 240.67(C) to read as follows:

240.67(C) Performance Testing. ~~Where a method to reduce clearing time is required in 240.67(B), the~~ The arc energy reduction protection system shall be performance tested by primary current injection testing or another approved method when first installed on site. This testing shall be conducted by a qualified person(s) in accordance with the manufacturer's instructions.

~~Performance testing of an instantaneous element of the protective device shall be conducted by a qualified person(s) using a test process of primary current injection and the manufacturer's recommended test procedures. A written record of this testing shall be made and shall be available to the authority having jurisdiction.~~

Informational Note: Some energy reduction protection systems cannot be tested using a test process of primary current injection due to either the protection method being damaged such as with the use of fuse technology or because current is not the primary method of arc detection.

Substantiation: The language established by CMP-10 in the Second Draft of the 2020 NEC in SR 8020 recognizes the need to performance test the system for providing energy reduction for electrical worker safety, however it currently requires only primary current injection testing of “instantaneous elements of the protective device.” Not ALL energy reduction systems will utilize the instantaneous functionality of the overcurrent protective device to meet the main requirement to reduce arc energy. Therefore, the language must be revised to reference the manufacturer's instructions that will ensure the system is properly performance tested without: 1) performing unnecessary tests, 2) damaging the equipment, or 3) omitting necessary performance testing for the specific technology.

The informational note is also added to this new requirement to alert the reader of potential equipment damage and that other means of compliance may be necessary in accordance with the manufacturer's instruction to conduct the performance test to comply with 240.67(C).

Proposed Tentative Interim Amendment: Soliciting public comments: Proposed TIA No. 1452, Reference: 240.87(C) and Informational Note (new) in the 2020 edition.

1. Revise 240.87(C) to read as follows:

240.87(C) Performance Testing. The arc energy reduction protection system shall be performance tested by primary current injection testing or another approved method when first installed on site. This testing shall be conducted by a qualified person(s) in accordance with the manufacturer's instructions.

~~Performance testing of an instantaneous element of the protective device shall be conducted by a qualified person(s) using a test process of primary current injection and the manufacturer's recommended test procedures.~~

A written record of this testing shall be made and shall be available to the authority having jurisdiction.

Informational Note: Some energy reduction protection systems cannot be tested using a test process of primary current injection due to either the protection method being damaged such as with the use of fuse technology or because current is not the primary method of arc detection.

Substantiation: The language established by CMP-10 in the Second Draft of the 2020 NEC in SR 8030 recognizes the need to performance test the system for providing energy reduction for electrical worker safety, however it currently requires only primary current injection testing of "instantaneous elements of the protective device." Not ALL energy reduction systems will utilize the instantaneous functionality of the overcurrent protective device to meet the main requirement to reduce arc energy. Therefore, the language must be revised to reference the manufacturer's instructions that will ensure the system is properly performance tested without: 1) performing unnecessary tests, 2) damaging the equipment, or 3) omitting necessary performance testing for the specific technology.

The informational note is also added to this new requirement to alert the reader of potential equipment damage and that other means of compliance may be necessary in accordance with the manufacturer's instruction to conduct the performance test to comply with 240.87(C).

Proposed Tentative Interim Amendment: Soliciting public comments: Proposed TIA No. 1455, Reference: Annex D3 in the 2020 edition.

Two pages of revisions to "Example D3 Store Building" (too much text to reproduce in *Standards Watch*.)

Substantiation: Because revisions to Article 220 were finalized late in the Second Draft meeting, there was not enough time to correctly revise the Example. This TIA will revise the necessary part of example to coordinate with the changes made to Article 220. The square foot values used for the store size were changed in order to preserve the original intent of Example D3 which was for the calculated load to be less than the required connected load.

Proposed Tentative Interim Amendment: Soliciting public comments: Proposed TIA No. 1458, Reference: 334.10(2) and (3) in both the existing 2017 edition and in the 2020 edition.

Proposed 2017 edition wording:

1. Revise 334.10(2) and (3) to read as follows:

334.10 Uses Permitted. Type NM, Type NMC, and Type NMS cables shall be permitted to be used in the following, except as prohibited in 334.12:

- (1) One- and two-family dwellings and their attached or detached garages, and their storage buildings.
- (2) Multi-family dwellings permitted to be of Types III, IV, and V construction that are 4 stories or fewer.
- (3) Other structures permitted to be of Types III, IV, and V construction that are 4 stories or fewer. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies

Proposed 2020 edition wording:

1. Revise 334.10(2) and (3) to read as follows:

334.10 Uses Permitted. Type NM and Type NMC cables shall be permitted to be used in the following, except as prohibited in 334.12:

- (1) One- and two-family dwellings and their attached or detached garages, and their storage buildings.
- (2) Multi-family dwellings permitted to be of Types III, IV, and V construction that are 4 stories or fewer.
- (3) Other structures permitted to be of Types III, IV, and V construction that are 4 stories or fewer. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.

Substantiation: The 2002 NEC removed a 3-story limit for NM Cable in Section 334.10, replacing the requirement with a reference to building construction type, limiting the use of NM cable to Types III, IV, and V. The effect was to effectively allow NM Cable in buildings up to 4- stories. For the 2021 code changes to the

International Building Code, there were 14 proposals to add Mass Timber Buildings into the IBC, increasing the allowable height of wood structures up to 18 stories. The International Code Council membership voted to add new categories of type IV buildings (mass timber) to include buildings up to 18 stories in Table 505.4. See proposal G80-18 at <http://media.iccsafe.org/code-development/2018-Complete-ICC-Public-CommentAgenda-compressed.pdf>. An unintended consequence of this action is to drastically increase the number of floors where NM cable can be installed without the impact of these changes being able to be reviewed by the public. A review of the documentation submitted to ICC revealed detailed analysis of fire control and egress requirements, but no recognition of the impact on wiring methods.

In deliberations for the 2002 Edition of the NEC®, Proposal 7-135 was initially rejected by CMP-7, but by the end of the process was accepted into the 2002 Edition, which recognized the Type III, IV, and V construction types where NM Cable could be installed. Inherent in those deliberations was the recognition that the prevailing limit on such buildings was 4-stories (with a few rare allowances for 5 and 6 stories). As such, the concept of NM Cable in buildings of 18 stories was never discussed or considered. There were certainly safety concerns with the limited increase in height at the time, and those concerns are still relevant today.

In order to preserve the integrity of NFPA's ANSI approved code development process, this TIA is critical. The technical merits of allowing NM cable in buildings higher than 4-stories should be fully discussed and vetted through the regular process at the 2023 NEC code-change process. The alternative will be to allow a different code, developed through a different process, to drastically alter the provisions of the National Electrical Code®. Acceptance of this TIA will insure that the NEC® development and change process works as intended.

Emergency Nature: The proposed TIA intends to accomplish a recognition of an advance in the art of safeguarding property or life where an alternative method is not in current use or is unavailable to the public. The safe use of Type NM Cable in structures above 3 stories in height was questionable in the 2002 code cycle. This is of an emergency nature because, without it, the NEC® is effectively and drastically altered without public input or deliberation by the electrical experts on CMP-6, and will allow installations of unknown safety. The TIA is critical in maintaining the current code requirements as approved through the NFPA process.

WTO Technical Barrier to Trade notifications

Notify US, the U.S. Department of Commerce's service to announce Technical Barrier to Trade filings, has announced some TBTs that may be of interest to Standards Watch readers. If you have a problem with a TBTs, you can protest through your representative to the World Trade Organization. (So far the USA is still a member of the WTO.) See "Guidance for Comment Submissions by U.S. Industry on TBT Notifications" at <http://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> or <http://ec.europa.eu/growth/tools-databases/tbt/en/tbt-and-you/being-heard/> for advice on filing objections.

Ecuador Notification ECU/407

Date issued: 3 May 2019

Agency responsible: Ecuadorian Standardization Service (INEN)

National inquiry point: Ministry of Production, Foreign Trade, Investment and Fisheries (MPCEIP)

Products covered: Safety headgear (HS 650610)

Title: Proyecto de Segunda Revisión del Reglamento Técnico Ecuatoriano PRTE INEN 086 (2R) "Casco de seguridad y protección" (Draft second revision (2R) of Ecuadorian Technical Regulation PRTE INEN No. 086 "Safety and protective headgear") (11 pages, in Spanish)

Description of content: The notified Ecuadorian Technical Regulation establishes the requirements to be met by safety and protective headgear, prior to the marketing of domestic and imported products, with the aim of protecting human safety and preventing deceptive practices.

It applies to the following products: 1. Safety headgear for general and specific use in industry. 2. Protective headgear for pedal cyclists and for users of skateboards and roller skates, including protective headgear for young children. 3. Protective headgear for use by drivers and passengers of motorcycles.

It does not apply to: 1. Firefighters' helmets. 2. Military or police helmets. 3. Helmets for canoeing or kayaking and white-water sports.

Objective and rationale: Consumer information, labelling; Prevention of deceptive practices and consumer protection; Protection of human health or safety

Relevant documents:

1. ISO 2859-1:1999+Amd 1:2011, Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection.
2. ISO/IEC 17025:2017, General requirements for the competence of testing and calibration laboratories.
3. ISO/IEC 17050-1:2004, Conformity assessment - Supplier's declaration of conformity - Part 1: General requirements.
4. ISO/IEC 17067:2013, Conformity assessment - Fundamentals of product certification and guidelines for product certification schemes.
5. EN 397:2012+A1:2012, Industrial safety helmets.
6. EN 1078:2012+A1:2012, Helmets for pedal cyclists and for users of skateboards and roller skates.
7. EN 1080:2013, Impact protection helmets for young children.
8. ANSI/ISEA Z89.1-2014, Industrial Head Protection.
9. Ecuadorian Technical Standard NTE INEN 146 (2R):2015, Cascos de seguridad para uso industrial. Requisitos e inspección.
10. UN Regulation No. 22 – Revision 4:2002+Amend.1:2012+Amend.2:2019, Uniform provisions concerning the approval of protective helmets and their visors for drivers and passengers of motor cycles and mopeds.
11. Federal Motor Vehicle Safety Standard (FMVSS) No. 218, 49 CFR Part 571, Motorcycle helmets.

Notification history: 1. G/TBT/N/ECU/102 2. G/TBT/N/ECU/102/Add.1 3. G/TBT/N/ECU/102/Add.2

Proposed date of adoption: 2 July 2019

Proposed date of entry into force: 29 December 2019

Final date for comments: 2 July 2019

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/ECU/full_text/pdf/ECU407\(spanish\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/ECU/full_text/pdf/ECU407(spanish).pdf)

United States of America Notification USA/1484

Date issued: 21 May 2019

Agency responsible: Office of Energy Efficiency and Renewable Energy (OEERE)

National inquiry point: USA WTO TBT Enquiry Point

Products covered: Distribution transformers; Electrical transformers, static converters (for example, rectifiers) and inductors (HS 8504)

Title: Energy Conservation Program: Test Procedure for Distribution Transformers (27 page(s), in English)

Description of content: The U.S. Department of Energy ("DOE") proposes clarifying amendments to the test procedure for distribution transformers to revise and add definitions of certain terms, to incorporate revisions based on the latest versions of relevant Institute of Electrical and Electronics Engineers (IEEE) industry standards, and to specify the basis for voluntary representations at additional per-unit loads (PULs) and additional reference temperatures. The proposals in this NOPR are minor revisions that do not significantly change the test procedure. Therefore, none of the revisions would pose undue burden on manufacturers. DOE is seeking comment from interested parties on the proposal.

Objective and rationale: Protection of the environment

Relevant documents: 84 Federal Register (FR) 20704, 10 May 2019; Title 10 Code of Federal Regulations (CFR) Part 431: <https://www.govinfo.gov/content/pkg/FR-2019-05-10/html/2019-09218.htm>

<https://www.govinfo.gov/content/pkg/FR-2019-05-10/pdf/2019-09218.pdf>

Energy Conservation Program: Test Procedures for Distribution Transformers - Final Rule published 27 April

2006: <https://www.govinfo.gov/content/pkg/FR-2006-04-27/html/06-3165.htm>

<https://www.govinfo.gov/content/pkg/FR-2006-04-27/pdf/06-3165.pdf>

Energy Conservation Program: Test Procedure for Distribution Transformers - Request for Information

published 22 September 2017: <https://www.govinfo.gov/content/pkg/FR-2017-09-22/html/2017-20225.htm>

<https://www.govinfo.gov/content/pkg/FR-2017-09-22/pdf/2017-20225.pdf>

G/TBT/N/USA/682/Add.2 issued 25 April 2013 - Energy Conservation Program: Energy Conservation Standards for Distribution Transformers - Final Rule published 18 April 2013:

<http://www.gpo.gov/fdsys/pkg/FR-2013-04-18/html/2013-08712.htm>

<http://www.gpo.gov/fdsys/pkg/FR-2013-04-18/pdf/2013-08712.pdf>

G/TBT/N/USA/206 issued 9 August 2006 Energy Conservation Program for Commercial Equipment: Distribution Transformers Energy Conservation Standards; Proposed Rule published 4 August 2006:

<https://www.govinfo.gov/content/pkg/FR-2006-08-04/html/06-6537.htm>

<https://www.govinfo.gov/content/pkg/FR-2006-08-04/pdf/06-6537.pdf>

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 7 July 2019

Full text: <https://www.govinfo.gov/content/pkg/FR-2019-05-10/pdf/2019-09218.pdf>

Ecuador Notification ECU/424

Date issued: 14 May 2019

Agency responsible: Ecuadorian Standardization Service (INEN)

National inquiry point: Ministry of Production, Foreign Trade, Investment and Fisheries (MPCEIP)

Products covered: 8544.42 -- Fitted with connectors; Co-axial cable and other co-axial electric conductors (HS 854420); Other (HS 854449)

Title: Proyecto de Primera Revisión del Reglamento Técnico Ecuatoriano PRTE INEN 098 (1R) "Cables de transmisión de voz y datos" (Draft first revision (1R) of Ecuadorian Technical Regulation PRTE INEN No. 098 "Voice and data cables") (10 pages, in Spanish)

Description of content: The notified Ecuadorian Technical Regulation establishes the requirements to be met by voice and data cables, prior to the marketing of domestic and imported products, with the aim of protecting human safety and preventing deceptive practices.

It applies to the following products: 1. Co-axial cables; 2. Lead-in telephone cables, telephone cables for outdoor installations, and crossover telephone cables; 3. Outdoor telephone cables; 4. Twisted pair cables (UTP, STP, FTP, S-FTP). The notified Technical Regulation does not apply to: 1. Voice and data cables manufactured specifically for oil or mining installations, or for permanent or mobile offshore installations; 2. Short co-axial cables (all types) fitted with connectors.

Objective and rationale: Consumer information, labelling; Prevention of deceptive practices and consumer protection; Protection of human health or safety.

Relevant documents: Normative references: 1. ISO 2859-1:1999+Amd 1:2011, Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection; 2. ISO/IEC 11801-1:2017+Cor 1:2018, Information technology - Generic cabling for customer premises - Part 1: General requirements; 3. ISO/IEC 17025:2017, General requirements for the competence of testing and calibration laboratories; 4. ISO/IEC 17050-1:2004, Conformity assessment - Supplier's declaration of conformity - Part 1: General requirements; 5. ISO/IEC 17067:2013, Conformity assessment - Fundamentals of product certification and guidelines for product certification schemes; 6. IEC 60708:2005, Low-frequency cables with polyolefin insulation and moisture barrier polyolefin sheath; 7. IEC 61156-1:2009+Amd1:2009, Multicore and symmetrical pair/quad cables for digital communications - Part 1: Generic specification; 8. IEC 61196-1:2005, Coaxial communication cables - Part 1: Generic specification - General, definitions and requirements; 9. UL 444:2017, Communications Cables; 10. Ecuadorian Technical Standard NTE INEN 2538:2010, Cables telefónicos de acometida, instalaciones interiores y de cruzada. Requisitos. Notification history: 1. G/TBT/N/ECU/280 2. G/TBT/N/ECU/280/Add.1 3. G/TBT/N/ECU/280/Add.2

Proposed date of adoption: 13 July 2019

Proposed date of entry into force: 9 January 2020

Final date for comments: 13 July 2019

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/ECU/full_text/pdf/ECU424\(spanish\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/ECU/full_text/pdf/ECU424(spanish).pdf)

ANSI public review announcements

The following documents have been announced for public review by ANSI. Please send your comments before the deadline to the person indicated and to ANSI's Board of Standards Review at psa@ansi.org.

Due 16 June 2019

BSR/RVIA LV-201x, Standard for Low Voltage Systems in Conversion and Recreational Vehicles (revision of ANSI/RVIA LV-2017)

This standard covers the installation of low-voltage electrical systems and devices within recreational and conversion vehicles. In the absence of specific instructions from the Original Equipment Manufacturer (OEM), this standard also covers any additions, deletions, or modifications to any part of the original equipment chassis manufacturer's electrical system. Changes include raising the upper limit of "low voltage" to 60 V from 24 V,

adding requirements for lithium ion batteries, and photovoltaic systems.

View proposal at: https://tsp.esta.org/tsp/StandardsWatch/Extracted_RVIA_proposal.pdf

Send comments to: Kent Perkins kperkins@rvia.org

Due 1 July 2019

BSR/ASRHAIE/ICC/USGBC/IES Addendum ab to BSR/ASRHAIE/ICC/USGBC/IES Standard 189.1-201x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

ASHRAE Standard 189.1-2017ab adds external-view requirements as a jurisdictional option in Section 8 - Indoor Environmental Quality. To meet ASHRAE 189.1-2017ab, a view from the outdoors or an indoor atrium must be provided from at least 50% of the floor area in classrooms, offices, and patient rooms.

Single copy price: \$35.00

Obtain an electronic copy and offer comments at: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASSP A10.33-201X, Safety & Health Program Requirements for Multi-Employer Projects (revision and redesignation of ANSI/ASSE A10.33-2011 (R2016))

This standard sets forth the minimum elements and activities of a program that defines the duties and responsibilities of construction employers working on a construction project where multiple employers are engaged in the common undertaking to complete a construction project.

Single copy price: \$100.00

Order from and send comments to: Tim Fisher, tfisher@assp.org

BSR/AWS A3.0M/A3.0-201x, Standard Terms and Definitions Including Terms for Adhesive Bonding, Brazing, Soldering, Thermal Cutting, and Thermal Spraying (revision of ANSI/AWS A3.0M/A3.0-2009)

This standard is a glossary of the technical terms used in the welding industry. Its purpose is to establish standard terms to aid in the communication of information related to welding and allied processes. Since it is intended to be a comprehensive compilation of welding terminology, nonstandard terms used in the welding industry are also included. All terms are either standard or nonstandard. They are arranged in alphabetical sequence.

Single copy price: \$86.00

Order from: sborrero@aws.org

Send comments to: adavis@aws.org

Due 8 July 2019

BSR/UL 60947-5-5-201X, Standard for Safety for Low-voltage Switchgear and Controlgear - Part 5-5: Control Circuit Devices and Switching Elements - Electrical (identical national adoption of IEC 60947-5-5 and revision of ANSI/UL 60947-5-5-2017)

Emergency Stop Device with Mechanical Latching Function, incorporating Amendment 2 of the First Edition of IEC 60947-5-5. The first Edition of UL 60947-5-5 was published on August 11, 2017 and included Amendment 1 of the First Edition of IEC 60947-5-5. UL is proposing that this IEC standard be adopted with no national differences. Issues specific to the U.S., such as code and regulatory requirements, are already specified in the Standard for Low-voltage Switchgear and Controlgear - Part 1: General Rules, UL 60947-1, and Part 5-1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices which will be used in conjunction with the Part 5-5 standard. The proposed UL 60947-5-5 will assist manufacturers interested in producing one product for use worldwide.

Single copy price: Contact comm2000 for price

Obtain a copy and offer comments at: <https://csds.ul.com/Home/ProposalsDefault.aspx>

New ANS projects

ANSI has announced the following new projects that might materially affect *Standards Watch* readers—or at least be interesting to them. Contact the developer if you (a) want to be involved in the project, (b) object to the project and wish it to be abandoned, or (c) if you would like to point out that its scope is covered by an existing standard, thereby possibly making the project redundant or conflicting.

ASQ/BSR ID1-201x, Inspection techniques and requirements - Guidelines (new standard)

Pertains to the inspections and tests necessary to substantiate conformity to drawings, specifications, and contractual requirements as well as all inspection and tests required by regulatory/statutory requirements. Currently, there is no standard for inspection techniques and requirements. The previous standards have been inactivated along with many other military standards.

Contact: Julie Sharp, standards@asq.org

BSR C12.32-201x, Standard for Direct Current Electricity Meters (new standard)

This document establishes acceptable performance criteria for revenue grade direct current (dc) watt-hour meters and demand meters. Accuracy class designations, current class designations, voltage ratings, environmental tests, and electromagnetic compatibility (EMC) tests are covered. Test procedures for voltage and current sensors that are separate from the meter are also covered. This document is designed as a reference for those concerned with the design of dc electricity metering, such as utilities, manufacturers, regulatory bodies, and operators/service providers. Intended for utility-type meters and sensors.

Contact: Paul Orr, Pau_orr@nema.org

BSR C81.61-201X, Electric Lamp Bases - Specifications for Bases (Caps) for Electric Lamps (revision of ANSI C81.61-2019)

This project is needed to add specification for GY8.6 pin base (fit system).

David Richmond, (703) 841-3234, David.Richmond@nema.org

BSR C81.62-201X, Electric Lampholders (revision of ANSI C81.62-2019)

This project is needed to add specification for GY8.6 lampholders (fit system).

David Richmond, (703) 841-3234, David.Richmond@nema.org

BSR NEMA WC 55021-201x, Military Internal Electrical Cable (revision of ANSI/NEMA WC 55021-2013)

This standards publication covers specific requirements for finished cables. The cables are intended for internal wiring of electrical equipment for use in the hook-up of various electronic assemblies. The component wires are covered by other reference standards. Cables constructed with PVC-insulated wires or jackets are not to be used for aerospace applications.

Contact: Gerard Winstanley, gerard.winstanley@nema.org

BSR/ASSE Z117.1-201x, Safety Requirements for Entering Confined Spaces (revision and redesignation of ANSI ASSE Z117.1-2016)

This standard provides minimum safety requirements to be followed while entering, exiting, and working in confined spaces at ambient atmospheric pressure.

Contact: Ovidiu Munteanu, OMunteanu@ASSP.org

BSR/E1.67-201x, Design, Inspection, Maintenance, Selection, and Use of Hand-operated Chain- and Lever Hoists for the Entertainment Industry (new standard)

This standard covers the design, inspection, maintenance, selection, and use of serially-manufactured, hand-operated chain- and lever hoists, having capacity of 2 tons or less and used in the entertainment industry. This standard does not cover attachment to the load or to the overhead structure.

Contact: Richard Nix, standards@esta.org

BSR/E1.68-201x, Recommended Practice for Evaluating DMX512 (ANSI E1.11) Interoperability (new standard)

The standard is a recommended practice for evaluating DMX512 (ANSI E1.11) interoperability, to help minimize problems in the field associated with violations of critical elements of the standard. The recommended practice will not attempt to assure 100% compliance with all requirements in the standard; it will focus on those that have been proven to make interoperability unlikely or unreliable. Lighting equipment is often sold that ostensibly communicates using DMX512 (ANSI E1.11). However, the equipment only works with some DMX512 devices and not others. This results in non-functional systems or expensive workarounds.

Contact: Karl Ruling, (212) 244-1505, standards@esta.org

BSR/IEC 60529-201x, Degrees of Protection Provided by Enclosures (IP Code) (identical national adoption) (national adoption of IEC 60529 with modifications and revision of ANSI/IEC 60529-2004 (R2011))

This standard describes a system for classifying the degrees of protection provided by the enclosures of electrical equipment. Whilst this system is suitable for use with most types of electrical equipment, it should not be assumed that all the listed degrees of protection are applicable to a particular type of equipment.

Contact: Muhammad Ali, muhammad.ali@nema.org

BSR/ISA 62443-3-3-201x, Security for industrial automation and control systems - Part 3-3: System security requirements and security levels (revision and redesignation of ANSI/ISA 62443-3 (99.03.03)-2013)

This part of the ISA 62443 series provides detailed technical control system requirements associated with the seven foundational requirements described in ISA 62443-1-1, including defining the requirements for control system capability security levels.

Contact: Eliana Brazda, ebrazda@isa.org

BSR/LEO 3000-201x, Climate Accounting Standard (new standard)

This is a climate accounting standard. This specification standard will provide a radiative forcing-based climate accounting protocol, which is an application of IPCC consensus climate science presented in the Fifth Assessment Report (AR5), and used in subsequent reports, including the IPCC's Special Report: Global Warming of 1.5°C. This protocol is intended to specify the methods for calculating climate footprints which include all known contributors to net positive radiative forcing, for determining the scale of radiative forcing reduction needed to stabilize climate, and for identify and supporting projects aimed at stabilizing the global climate system significantly below +1.5°C by 2030 and in decades to come. It will also specify the requirements for validation and verification of claims. Finally, it will describe potential funding mechanisms to achieve stabilization goals most cost-effectively, including direct investments in eligible Radiative Forcing reduction projects and infrastructure, governmental and market incentives, and public mitigation exchange platforms.

Contact: Michael Arny, michaelarny@leonardoacademy.org

BSR/NEMA 250-201x, Enclosures for Electrical Equipment (1000 Volts Maximum) (revision of ANSI/NEMA 250-2008)

This standard covers enclosures for electrical equipment rated not more than 1000 Volts and intended to be installed and used as follows: (a) Enclosures for indoor locations, Types 1, 2, 5, 12, 12K, and 13; (b) Enclosures for indoor or outdoor locations, Types 3, 3X, 3R, 3RX, 3S, 3SX, 4, 4X, 6, and 6P; and (c) Enclosures for hazardous (classified) locations Types 7 and 9.

Contact: Muhammad Ali, muhammad.ali@nema.org

BSR/UL 3401-201x, Standard for Safety for 3D Printed Building Construction (new standard)

The standard will cover the evaluation of buildings structures and building assemblies (including, but not limited to panels, walls, partitions, floor-ceilings, roofs, columns, and beams) that are fabricated using an additive manufacturing or 3D printing process. In this process a computerized model of the structure or building elements is developed, then the model and slicing software are used to direct an automated 3D printer to extrude additive manufacturing materials in a layer-upon-layer deposition process, to form the building elements.

Contact: Griff Edwards, griff.edwards@ul.com

Final actions on American National Standards

The documents listed below have been approved by the ANSI Board of Standards Review or by an ANSI-Audited Designator on the date noted. One approval is for a withdrawal.

ANSI C18.1M Part 2-2019, Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte Safety Standard (revision of ANSI C18.1M, Part 2-2017): 10 May 2019

ANSI C18.3M, Part 2-2019, Portable Lithium Primary Cells and Batteries - Safety Standard (revision of ANSI C18.3M, Part 2-2017): 10 May 2019

ANSI E1.30-11-2019, EPI 33 - ACN Root Layer Protocol Operation on TCP (new standard): 21 May 2019

ANSI E1.37-7-2019, Additional Message Sets for ANSI E1.20 (RDM) - Gateway & Splitter Messages (new standard): 23 May 2019

ANSI E1.44-2014 (R2019), Common Show File Exchange Format for Entertainment Industry Automation Control Systems - Stage Machinery (reaffirmation of ANSI E1.44-2014): 23 May 2019

ANSI J-STD-036-C-2011, Enhanced Wireless 9-1-1 Phase II (withdrawal of ANSI J-STD-036-C-2011): 7 May 2019

ANSI/AAMI/ISO 14971-2019, Medical devices - Application of risk management to medical devices (identical national adoption of ISO 14971 and revision of ANSI/AAMI/ISO 14971-2007 (R2016)): 10 May 2019

ANSI/ASA S1.17-2014/Part 1 (R2019), Microphone Windscreens - Part 1: Test Procedures for Measurements of Insertion Loss in Still Air (reaffirmation of ANSI/ASA S1.17-2014/Part 1): 21 May 2019

ANSI/ASA S12.18-1994 (R2019), Procedures for Outdoor Measurement of Sound Pressure Level (reaffirmation of ANSI/ASA S12.18-1994 (R2009)): 10 May 2019

ANSI/ASA S12.2-2019, Criteria for Evaluating Room Noise (new standard): 21 May 2019

ANSI/ASTM E1664-2019, Classification for Serviceability of an Office Facility for Layout and Building Factors (revision of ANSI/ASTM E1664-1995A (R2018)): 30 April 2019

ANSI/ASTM E2586-2019, Practice for Calculating and Using Basic Statistics (revision of ANSI/ASTM E2586-2018): 30 April 2019

ANSI/ASTM E2709-2019, Practice for Demonstrating Capability to Comply with an Acceptance Procedure (revision of ANSI/ASTM E2709-2014): 30 April 2019

ANSI/ASTM F395-2019, Terminology Relating to Vacuum Cleaners (revision of ANSI/ASTM F395-2010 (R2018)): 4/30/2019

ANSI/IES LM-79-2019, IES Approved Method: Optical and Electrical Measurements of Solid-State Lighting Products (new standard): 14 May 2019

ANSI/TIA J-STD-025-A-2003 (R2019), Lawfully Authorized Electronic Surveillance (reaffirmation of ANSI/TIA J-STD-025-A-2003 (R2012)): 7 May 2019

ANSI/TIA J-STD-025-B-1-2006 (R2019), Lawfully Authorized Electronic Surveillance (LAES) - Addendum 1: Addition of Mobile Equipment Identifier (MEID) (reaffirmation of ANSI/TIA J-STD-025-B-1-2006 (R2012)): 7 May 2019

ANSI/TIA J-STD-025-B-2-2007 (R2019), Lawfully Authorized Electronic Surveillance (LAES) - Addendum 2: Support for Carrier Identity (reaffirmation of ANSI/TIA J-STD-025-B-2-2007 (R2012)): 7 May 2019

ANSI/TIA J-STD-025-B-2006 (R2019), Lawfully Authorized Electronic Surveillance (reaffirmation of ANSI/TIA J-STD-025-B-2006 (R2012)): 7 May 2019

ANSI/UL 142-2019, Standard for Safety for Steel Aboveground Tanks for Flammable and Combustible Liquids (revision of ANSI/UL 142-2013): 17 May 2019

ANSI/UL 142-2019a, Standard for Safety for Steel Aboveground Tanks for Flammable and Combustible Liquids (revision of ANSI/UL 142-2013): 17 May 2019

ANSI/UL 142-2019b, Standard for Safety for Steel Aboveground Tanks for Flammable and Combustible Liquids (revision of ANSI/UL 142-2013): 17 May 2019

Draft IEC & ISO documents

This section lists proposed documents that the International Electromechanical Commission (IEC) or the International Organization for Standardization (ISO) are considering for approval. *Standards Watch* readers interested in reviewing and commenting on a document should order a copy from their national representative and submit their comments through them. Comments from US citizens on IEC and ISO documents should be sent to Charles T. Zegers at czegers@ansi.org and Karen Hughes at isot@ansi.org respectively. Any prices, if shown, are for purchases through ANSI. The sort order is by due date then alphanumeric.

65C/965/FDIS, IEC 62734/AMD1 ED1: Industrial networks – Wireless communication network and communication profiles - ISA 100.11a, 21 June 2019

85/683/FDIS, IEC 61557-7 ED3: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 7: Phase sequence, 21 June 2019

85/684/FDIS, IEC 61557-6 ED3: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 6: Effectiveness of residual current devices (RCD) in TT, TN and IT systems, 21 June 2019

85/685/FDIS, IEC 61557-5 ED3: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 5: Resistance to earth, 21 June 2019

85/686/FDIS, IEC 61557-4 ED3: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 4: Resistance of earth connection and equipotential bonding, 21 June 2019

85/687/FDIS, IEC 61557-3 ED3: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 3: Loop impedance, 21 June 2019

85/688/FDIS, IEC 61557-2 ED3: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 2: Insulation resistance, 21 June 2019

85/689/FDIS, IEC 61557-1 ED3: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 1: General requirements, 21 June 2019

ISO/DGuide 82, Guidelines for addressing sustainability in standards, 1 July 2019, \$68.00

44/849/DTR, IEC TR 62998-2 ED1: Safety of machinery – Safety related sensors used for protection of person - Part 2: Examples of application, 5 July 2019

65/753/CD, IEC TR 63164-2 ED1: Reliability of Industrial Automation Devices and Systems - Part 2: System reliability, 5 July 2019

ISO/DIS 21111-1, Road vehicles - In-vehicle Ethernet - Part 1: General information and definitions, 1 August 2019, \$53.00

ISO/DIS 21111-2, Road vehicles - In-vehicle Ethernet - Part 2: Common physical entity requirements, 1 August 2019, \$102.00

ISO/DIS 21111-3, Road vehicles - In-vehicle Ethernet - Part 3: Optical 1-Gbit/s physical entity requirements and conformance test plan, 1 August 2019, \$203.00

22G/390/CD, IEC 61800-3 ED4: Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods for PDS and machinery with embedded PDS, 2 August 2019

34A/2137/CD, IEC 63221/FRAG1 ED1: LED Light sources - Performance requirements, 2 August 2019

76/627/CD, IEC TR 62471-4 ED1: Photobiological Safety of Lamps and Lamp Systems - Part 4: Measuring Methods, 2 August 2019

Recently published IEC & ISO documents

Listed here are documents recently approved by the IEC or ISO. Prices shown are from the [ANSI Webstore](#).

IEC 62209-2 Ed. 1.1 b:2019, Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz), \$528.00

IEC 60479-2 Ed. 1.0 en:2019, Effects of current on human beings and livestock - Part 2: Special aspects, \$199.00

IEC 62209-2 Amd.1 Ed. 1.0 b:2019, Amendment 1 - Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz), \$12.00

IEC 62386-104 Ed. 1.0 b:2019, Digital addressable lighting interface - Part 104: General requirements - Wireless and alternative wired system components, \$317.00

IEC 63128 Ed. 1.0 b:2019, Lighting control interface for dimming - Analogue voltage dimming interface for electronic current sourcing controlgear, \$47.00

ISO 21931-2:2019, Sustainability in buildings and civil engineering works - Framework for methods of assessment of the environmental, social and economic performance of construction works as a basis for sustainability assessment - Part 2: Civil engineering works, \$138.00

ISO 34101-1:2019, Sustainable and traceable cocoa - Part 1: Requirements for cocoa sustainability management systems, \$185.00

ISO 34101-2:2019, Sustainable and traceable cocoa - Part 2: Requirements for performance (related to economic, social and environmental aspects), \$138.00

ISO 34101-3:2019, Sustainable and traceable cocoa - Part 3: Requirements for traceability, \$138.00

ISO 34101-4:2019, Sustainable and traceable cocoa - Part 4: Requirements for certification schemes, \$162.00

TSP meeting schedule

The following meetings will be at the Marriott Solana in Westlake, TX. Reserve a hotel room at <https://esta.org/ESTA/meetings.php>.

Control Protocols Plugfest	09:00 – 23:00	Friday 19 July 2019
	09:00 – 23:00	Saturday 20 July 2019
	09:00 – 23:00	Sunday 21 July 2019
Control Protocols Plugfest Webinar	19:00 – 20:30	Sunday 21 July 2019
Control Protocols Working Group	09:00 – 13:00	Saturday 20 July 2019
Control Protocols BSR E1.20 Task Group	14:00 – 23:00	Thursday 18 July 2019
Control Protocols Compliance Testing Task Group	14:00 – 18:00	Sunday 21 July 2019
	09:00 – 13:00	Monday 22 July 2019
Control Protocols NextGen Task Group	14:00 – 18:00	Friday 19 July 2019
Control Protocols/Rigging E1.59 Task Group	19:00 – 23:00	Friday 19 July 2019
Control Protocols E1.37-4 Task Group	09:00 – 13:00	Sunday 21 July 2019
Control Protocols E1.37-5 Task Group	14:00 – 18:00	Saturday 20 July 2019
Electrical Power E1.65 Electrical Inspection TG	09:00 – 13:00	Friday 19 July 2019
Event Safety Rigging Task Group	09:00 – 13:00	Saturday 20 July 2019
Event Safety Working Group	14:00 – 18:00	Saturday 20 July 2019
Floors Working Group	19:00 – 23:00	Thursday 18 July 2019
Fog & Smoke Working Group	15:00 – 18:00	Thursday 18 July 2019
Followspot Position Working Group	19:00 – 23:00	Friday 19 July 2019
Photometrics Working Group	09:00 – 13:00	Friday 19 July 2019
Rigging Working Group	14:00 – 18:00	Friday 19 July 2019
Rigging E1.39 Task Group	19:00 – 23:00	Thursday 18 July 2019
Rigging E1.67 Task Group	14:00 – 18:00	Thursday 18 July 2019
Rigging/Control Protocols E1.59 Task Group	19:00 – 23:00	Friday 19 July 2019
Stage Machinery E1.6-4 Chain Hoist Control	09:00 – 13:00	Friday 19 July 2019
Stage Machinery Working Group	19:00 – 23:00	Saturday 20 July 2019
Technical Standards Council	09:00 – 13:00	Sunday 21 July 2019

The autumn TSP meetings will be held at the Marriott Solana in Westlake, TX, around the weekend of 26-27 October. The scheduling has just begun; only a few meetings are listed now, but more will be listed at <https://esta.org/ESTA/meetings.php>.

TSP donors who have made long-term, multi-year pledges

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