## NEMA

# STANDARDIZATION

STRATEGY

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### Preamble

This document is the result of a consultative process among NEMA members and represents strategic direction to guide NEMA's participation in domestic, regional and international standardization processes. In support of this strategy, and in recognition of the diversity of markets served by NEMA members, each product Section should select appropriate objectives and develop strategies to meet the specific needs of its members and their markets.

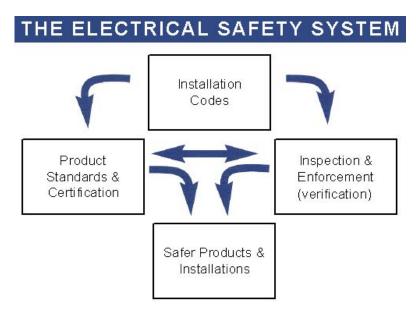
The Section entitled *Objectives and Specific Strategies* provides specific strategies that can be used towards achieving each of the six objectives.. Product Sections are encouraged to use these and others as appropriate. This document supersedes the November 2001 revision and reflects today's standards and conformity assessment issues, including the need to address systems in addition to the traditional products.

#### FUNDAMENTAL PRINCIPLES

NEMA recognizes the fact that strong standards and conformity assessment systems are vitally important to public safety, facilitate global market access for products and services, create new market opportunities for emerging technologies and can serve as one of the best ways to achieve governmental regulatory goals and protection of society as a whole. This recognition is further supported by the following fundamental principles that are the underpinning of any domestic, regional and international standards and conformity assessment system.

- 1. Standards must be developed in a voluntary, consensus based standards process.
- The standards development system must be open to all interested parties, operated in a transparent manner and have a balance of interests such that no single interest dominates the system.
- 3. Private sector developed standards and conformity assessment systems should be utilized by government entities and regulators as a key method to provide solutions to public policy issues.

- Governments should provide guidance to the private sector when new standards or conformity assessment systems are needed to accomplish government regulatory objectives.
- 5. NEMA and the private sector must provide staffing and leadership to develop standards and conformity assessment systems in a timeframe consistent with market need and technology maturity.
- Conformity assessment systems must provide for transferable, accurate, consistent and equitable results for global markets without requiring redundant testing and/or certification.
- 7. NEMA supports an electrical safety system recognizing the interdependence and interaction of its components (installation codes, product standards, certification, and inspection) (as depicted below).



The conformity assessment system reflects the safety requirements and expected level of performance called out in the standard. A properly aligned system ensures the delivery of a safer electrical system to the public.

### **Major Objectives**

The following objectives have been established in support of NEMA's mission to take an active role in standards and conformity assessment systems of interest to NEMA members in domestic, regional and international markets:

- 1. Globally harmonized standards that include essential regional requirements.
- 2. Safer products and systems through coordinated installation codes, product standards, conformity assessment, and verification processes to the extent applicable to each industry segment.

- 3. Consistent and equitable conformity assessment practices without redundant testing.
- 4. Leadership in the development of standards and conformity assessment processes for new and emerging technologies, and identified public interests, including both products and systems.
- 5. Increased NEMA member awareness of, participation in, and influence over standardization activities impacting member products and systems.
- 6. Improved operational effectiveness of all standardization processes in which NEMA, NEMA members, and NEMA groups are involved.

#### **Specific Strategies for the Major Objectives**

1. Globally harmonized standards that include essential regional requirements. Specific strategies may include:

- a. Developing programs that promote the acceptance of NEMA member products in key markets around the world.
- b. Attaining and maintaining active participation in the USNC/IEC and US/ISO management activities.
- c. Supporting the development of implementation procedures for the IEC Policy on Global Relevance of IEC standards and promoting the use of the procedures to develop IEC standards.
- d. Securing ANSI recognition for a greater number of NEMA standards.
- e. Securing the adoption and use of North American based standards by governmental bodies.
- f. Pursuing incorporation of North American standards practices by the nations of the Americas.
- g. Retaining CANENA Council Secretariat.
- h. Seeking COPANT endorsement for standards harmonization proposals through CANENA.
- i. Establishing a network of NEMA member companies and their parents, subsidiaries, and affiliates around the world to develop and promote common positions where appropriate.
- j. Establishing closer liaisons with additional regional organizations (e.g., CEN, CENELEC, ETSI) to share and monitor standards information.
- k. Promoting the adoption of relevant regional and international (CENELEC, CANENA, IEC, ISO, etc.) standards as U.S. and North American standards, as appropriate.

2. Safer products and systems through coordinated installation codes, product standards, conformity assessment, and verification processes to the extent applicable to each industry segment. Specific strategies may include:

- Promoting the understanding that electrical systems safety depends on coordination of product standards with installation requirements regulating the electrical transmission, distribution, and premise wiring infrastructures.
- b. Promoting and supporting, in cooperation with other organizations, electrical safety programs that provide increased public awareness and education.
- c. Pursuing regional harmonization of electrical installation codes.
- d. Actively supporting and encouraging qualified electrical inspections.
- e. Pursuing and advocating the development of codes and product standards in an open and transparent consensus system worldwide.
- f. Maintaining industry participation in all appropriate NFPA Code Making Panels, Technical Committees, and Technical Correlating Committees.

3. Consistent and equitable conformity assessment practices without redundant testing. Specific strategies may include:

- a. Taking a proactive role with the organizations in the Americas that influence product acceptance requirements in their countries.
- b. Maintaining active liaisons with SDOs, organizations and certifiers as appropriate.
- c. Encouraging private sector agreements on conformity assessment activities for unregulated products.
- d. Where appropriate, promoting acceptance of one test, with product acceptance based upon supplier's declaration of conformity or third-party certification, as determined by the marketplace.
- e. Participating in the development of conformity assessment systems that affect NEMA members.
- f. Encouraging participation in the IECEE CB Scheme and the IEC Ex Scheme for appropriate NEMA member products.

4. Leadership in the development of standards and conformity assessment processes for new and emerging technologies, and identified public interests, including both products and systems. Specific strategies may include:

- a. Identifying where new standards are needed and promoting their development and use, where appropriate.
- b. Respond to government guidance for the need to develop new or modify existing standards.
- c. Identify already available standards and promoting their further development and use, where appropriate.
- d. Supporting new alternatives to standards for fast-moving technologies.

5. Increased NEMA member awareness of, participation in, and influence over standardization activities impacting member products and systems. Specific strategies may include:

a. Developing general materials and specific examples that demonstrate benefits to NEMA members received from participation in standardization.

- b. Optimizing NEMA member representation in SDOs (e.g. UL, CSA, ANCE) and other organizations whose standardization activities impact NEMA members.
- c. Identifying candidates for and sponsoring, where appropriate, leadership positions (e.g. USNC, IEC). Leadership positions would include President, Vice President, Secretarys and Chairs.
- d. Providing adequate delegate funding to support effective participation.
- e. Seeking additional U.S. and industry experts to participate in international standards activities.

6. Improved operational effectiveness of all standardization processes in which NEMA, NEMA members, and NEMA groups are involved. Specific strategies may include:

- a. Increasing consumer and user participation in the NEMA standards development process.
- b. Using online collaborative authoring tools to develop standards to minimize cost and resources, and to maximize members' ability to participate.
- c. Facilitating effective use of electronic communications and web-based tools (document exchange, surveys, balloting, etc.) throughout the standards development and approval process.
- d. Employing appropriate tools to enable timely and efficient development and maintenance of NEMA and related industry standards and other technical documents.
- e. Publishing and distributing standards in electronic format.

#### Glossary

#### **Strategic Planning Terms**

**Domestic Standard:** A standard adopted, recognized and/or used within an individual country. The document may originate as an International or Regional standard.

International Standard: A standard applicable to and used across multiple regions.

**Objective:** A broad, long-range end or measurable outcome to which NEMA will direct its effort over an extended period to improve the organization's service to its members and the industry.

**Regional Standard:** A standard applicable to and used in a group of countries in proximity to each other, e.g. North America, Europe, Middle East.

**Standardization Process:** A process that may include any or all of the following - standards development, installation codes, conformity assessment (testing, certification, accreditation), and inspection/verification.

**Strategy:** A careful plan of action to support the objective, taking into account existing and anticipated opportunities, challenges, and resources.

#### **Other Terms & Abbreviations**

ANCE	Association of Electrical Standards and Certification. (Mexico)
ANSI	American National Standards Institute
CANAME	National Chamber of Electrical Manufacturers. (Mexico)
CANENA	Council for Harmonization of Electrotechnical Standards of the Nations of the Americas
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnial Standardization
CMPs	National Electrical Code, Code-Making Panels
Conformity	A procedure that involves the evaluation of products, processes, or services to determine
Assessment	the extent to which assurance may be given that they fulfill specific requirements. These
	evaluations could result in manufacturer's declaration, third-party certification, or
	laboratory accreditation systems.
COPANT	PanAmerican Commission of Technical Standards
CSA	Canadian Standards Group
EFC	Electro-Federation Canada
ETSI	European Telecommunications Standards Institute
FMRC	Factory Mutual Research Corporation
IEC	International Electrotechnical Commission
IECEE CB Scheme	Worldwide scheme for the safety of electrical equipment that is based on the principle of
	reciprocal recognition of test results among participating national certification bodies to
	simplify certification at national levels.
IEC Ex Scheme	Worldwide scheme for the safety of electrical equipment intended for use in explosive
	atmospheres that is based on worldwide acceptance of a single standard, a single
	certificate, and a single mark.
ISO	International Standards Organization
SDO	Standards Development Organization
STP	Standards Technical Panel
UL	Underwriters Laboratories Inc.

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USNC United States National Committee TC Technical Committee

#### **NEMA's Vision**

With a North American focus and global reach, NEMA is the voice of and forum for the electrical and medical imaging industries serving manufacturer members.

#### **NEMA's Mission**

As the voice for the electrical and medical imaging industries, NEMA is a pacesetting champion for safety, innovation, interoperability, environment, and market enhancement through advocacy, business information, and standards for products, systems, and technologies.

#### **NEMA Member Values**

Membership in NEMA signifies shared core values for electrical and medical imaging product manufacturers operating in the NEMA environment:

- We promote the safe and effective design, installation and use of electrical and medical imaging products.
- We value open, competitive markets for electrical and medical imaging products and support national regulations and voluntary standards that are technically sound, economically justified, and promote innovation, public safety, access to life saving and energy efficient products, and efficient resource allocation.
- We collaborate within NEMA to improve production and manufacturing of electrical and medical imaging products, to enlarge their distribution, and to promote innovation and increased efficiency and safety of use of electrical and medical imaging products.
- We are opposed to conduct which is likely to defraud or deceive the public or our customers about our industry's capabilities, products and services.
- We have zero tolerance for those who traffic in or promote the sale of counterfeit and pirated products.
- We honestly represent our products when making claims that those products meet or exceed industry and governmental standards established by NEMA or other standards development organizations.
- We oppose corruption of any kind, including but not limited to illegal payments to influence official action or to obtain an improper commercial advantage.
- We conduct our business responsibly & ethically and in compliance with all of the laws and regulations where we do business.

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#### About NEMA

The National Electrical Manufacturers Association (NEMA) is the association of electrical equipment and medical imaging manufacturers, founded in 1926 and headquartered in Rosslyn, Virginia. Nearly 400 members strong, its companies manufacture a diverse set of products including power transmission and distribution equipment, lighting systems, factory automation and control systems, and medical diagnostic imaging systems. Total U.S. shipments for electroindustry products exceed \$100 billion annually.

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