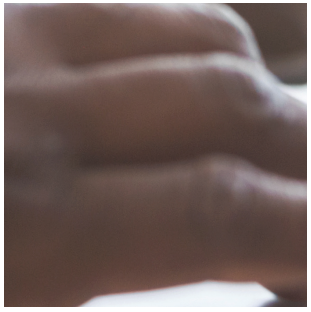
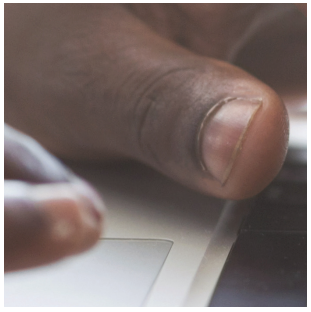
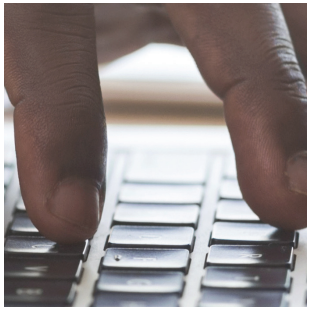
International Nuclear I&C and Electrical System Standards Tables with URLs

Version 2, January 2024

Cooperation in Reactor Design Evaluation and Licensing Working Group


WORLD NUCLEAR ASSOCIATION

Title: International Nuclear I&C and Electrical System Standards Tables with URLs
Version 2
Produced by: World Nuclear Association
Published: January 2024
Report No. 2024/001

International Nuclear I&C and Electrical System Standards Tables with URLs brings together the nuclear power plant instrumentation and control (I&C) and electrical system standards used by the Institute of Electrical and Electronics Engineers (IEEE) and International Electrotechnical Commission (IEC) communities. Both sets of these standards are used in different parts of the world. This document is intended as a starting point for identifying similarities and conflicts between the two sets of standards with the goal informing I&C and electrical workers of the available standards and to identify potential areas where harmonization of standards might be achieved.

The IEEE standards tend to be used by the US Nuclear Regulatory Commission (NRC) and by other nuclear regulators that follow the NRC. The main NRC requirements are contained in Part 50 of the Code of Federal Regulations (CFR) Title 10, with additional recommendations given in Regulatory Guides and NUREG documents. Various standards bodies provide guidance, most notably the IEEE Nuclear Power Engineering Committee (NPEC) and the IEEE Energy Development and Power Generation Committee, as well as the IEEE Switchgear Committee, IEEE Protective Relay Committee, IEEE Transformer Committee, IEEE Low Voltage Surge Protection Device Committee, IEEE Energy Storage and Station Battery Committee, IEEE Electromagnetic Compatible Society, IEEE Industrial Automation and Control Committee, International Society of Automation, American Nuclear Society, Health Physics Society, and American Society of Mechanical Engineers.

IEC standards tend to be used by countries that follow the guidance of the International Atomic Energy Agency (IAEA). The most notable IAEA safety standard for I&C and electrical systems is IAEA SSR 2/1, *Safety of Nuclear Power plants: Design*. Five documents provide additional guidance to SSR 2/1: SSG-30, *Safety Classification of Structures, Systems and Components in Nuclear Power Plants*; SSG-34, *Design of Electrical Power Systems for Nuclear Power Plants*; SSG-39, Design of Instrumentation and Control Systems for Nuclear Power Plants; SSG-51, *Human Factors Engineering in the Design of Nuclear Power Plants*; and SSG-69, *Equipment Qualification for Nuclear Installations*.

IEC SC 45A (Instrumentation, control and electrical power systems of nuclear facilities) is the main subcommittee responsible for nuclear facility I&C standards. Other relevant IEC committees include SC 45B (Radiation protection instrumentation), TC 65 (Industrial process measurement, control and automation), and TC 77 (Electromagnetic compatibility).

In response to the increased need for harmonization, the IEC and IEEE enhanced their collaboration on the adoption, revision and joint development of market-relevant standards. An agreement between the two organizations was signed in October 2002, which allows for the adoption of IEEE standards by the IEC with no changes. This agreement was followed by the adoption of a joint development procedure in 2008 defining how the two organizations work to co-develop standards. IEE standards that have been adopted by the IEC and those jointly developed are referred to as ‘dual logo’ standards.

This document consists of tables that show the IEC and IAEA electrical and I&C nuclear standards alongside the corresponding US and NRC documents. The tables identify the safety classification of each standard; however, individual standards often support more than one safety classification. Note also that where a Regulatory Guide supports a standard, the safety classification is consistent with the Regulatory Guide and may not correspond with that of the standard.

The tables are highlighted as follows:

Black - standards developed by IEC 45A or IEEE NPEC.

Yellow - IEC 45A and/or IEEE NPEC standards that have also been accepted as CENELEC (European Committee for Electrotechnical Standardization) standards.

Light green - standards that were not developed by IEC TC 45A or IEEE NPEC.

Dark grey - standards under development.

It should be noted that some of the standards listed here are no longer current but they are retained as they are still being used by older plants or because the guidance given in these standards is still useful. It should also be noted that the NRC Regulatory Guides and NUREG documents often lag behind industrial standards. In addition, NRC Regulatory Guides conflict with many industrial standards. Therefore, US users should consult with the NRC before adopting a new standard to determine if there may be any inconsistency with the NRC's approach – the "additional information" column in the NRC's list of Regulatory Guides often identifies issues that the NRC is considering in the updates.

Clicking in any box in the tables will take the user to further information given by the responsible standards organization. In the case of the NRC, the user will be taken directly to the documents in question. No further analysis or conclusions are provided in this document.

International Nuclear I&C and Electrical System Standards Tables with URLs is produced by the CORDEL Digital Instrumentation & Control Task Force (DICTF) of World Nuclear Association. The document is regularly revised to incorporate evolutions and updates to the relevant I&C standards.

Errors and omissions should be sent to CORDEL@world-nuclear.org.

Acknowledgement

The CORDEL Working Group of World Nuclear Association would like to convey its gratitude to: Gary Johnson, Independent Expert and former Senior Safety Officer at the IAEA, for collecting and providing the information in these comparison tables; the IEEE and IEC for agreeing to use the respective information for this publication; Johannes Pickelmann, Chair of the DICTF and Mark Burzynski, member of the DICTF for their work in reviewing the publication; and World Nuclear Association colleague Richard Petrie for his assiduous work in designing this reference tool.

Key to tables

Basic Safety Classification of I&C and Electrical Systems

IEEE and US Standards		International Standards	
Non Safety	Systems Important to Safety		Non Safety
	Safety Systems		

Relationships between standards

Dual logo standard	IEEE/IEC XXXXX or IEEE XXXX IEC		IEEE standard adopted by IEC
	IEEE or US	IEC Standard	Standards are approximately the same
	IEEE or US Standard	IEC Standard	Scopes are different but overlap
Reg Guide X.XX	IEEE or US Standard	IEC Standard	Reg. Guide, IEEE, and IEC standards are similar but IEC standard is not endorsed
Reg Guide X.XX	IEEE or US Standard	IEC Standard	Reg. Guide endorses both US and IEC standard
	IEEE, Other US or IEC standard under development		

Notes

1. To allow for compact presentation of this material, the standard names given in this document are shortened by omitting the full name of the standards organization and safety classification.
2. The boxes generally include a URL in small text. These will take you to the standards organization website for the standard. For NRC documents the URL returns the actual document.
3. NRC Reg Guides that endorse IEEE and IEC standards are highlighted in blue.
4. Green text indicates standards that were not developed by IEC SC45A, IEEE NPEC.
5. This document gives an overview of where to find related standards. It is not designed to make a detailed comparison of each standard.
6. Errors and questions should be reported to CORDEL@world-nuclear.org — Your comments will be taken into account in the following revision of the document.

Overarching Documents

Non Safety	Systems Important to Safety	Non Safety
	Safety Systems	

USNRC 10 CFR 50
Domestic licensing of production and utilization facilities

IAEA SSR 2/1 Rev. 2
Safety of nuclear power plants: Design

IAEA SSG 30
Safety classification of structures systems and components in nuclear power plants

IAEA SSG 34
Design of electric power systems for nuclear power plants

IAEA SSG 39
Design of instrumentation and control systems for nuclear power plants

IAEA SSG 51
Human factors engineering in the design of nuclear power plants

IAEA SSG 69
Equipment qualification for nuclear installations

National regulations

IEEE 603-2018
Standard criteria for safety systems

IEEE 279-1971
Criteria for protection systems

IEC 61508:2020
Functional safety of electrical/electronic/programmable electronic safety-related systems
Part 1, Part 2, Part 3, Part 4, Part 5, Part 6, Part 7.

IEC 61513:2011
Instrumentation and control systems important to safety - General requirements for systems

IEC 63046:2020
Electrical power system - General requirements

IEC TR 63335:2021
Specific features of small modular reactors and needs regarding standards

IEC TR 63400:2021
Structure of the SC 45A standards series

Notes

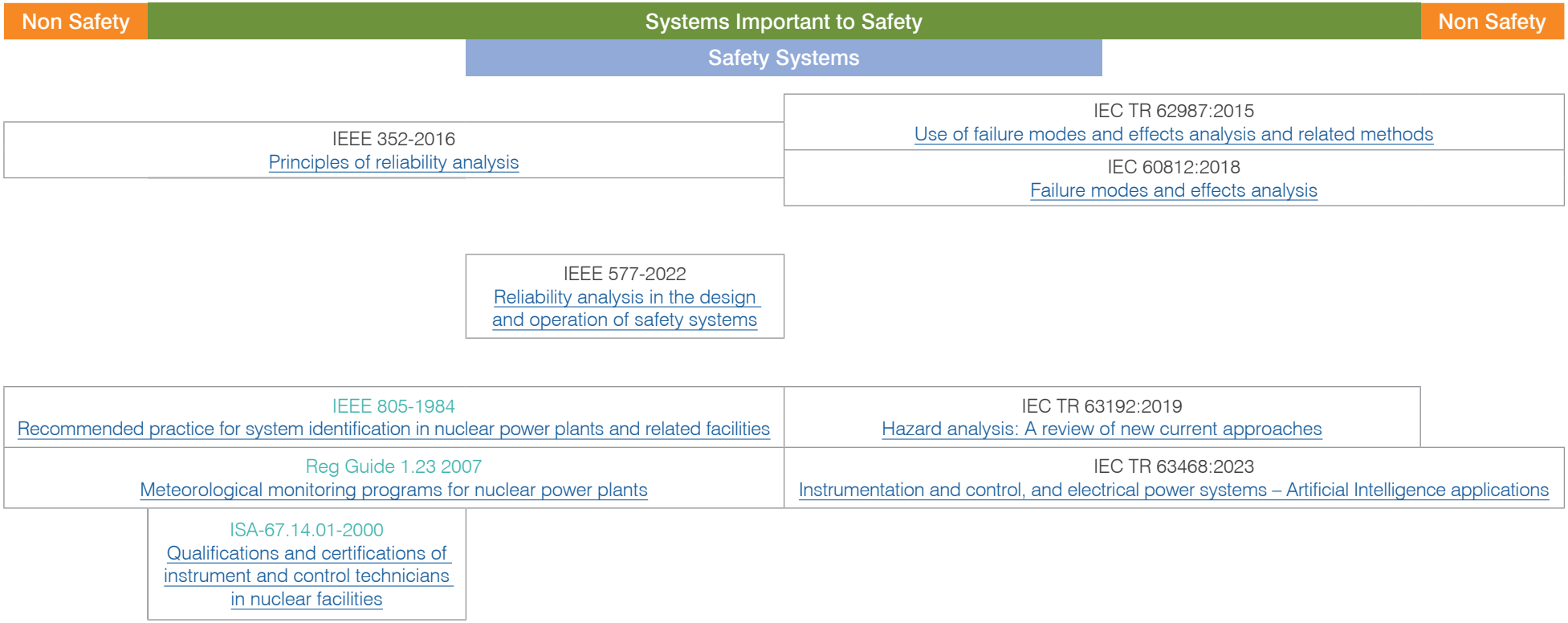
1. IEEE 603-1991, IEEE-297-1968 and IEEE-297 are incorporated into the requirements of 10 CFR 50. Each plant must comply with one of these depending upon the date of the plant's construction permit. For plants having permits issued before January 1, 1971 the requirements analogous to the IEEE-603 add IEEE 279 series are given in the plant licensing documents.
2. The scopes of IAEA SSG39 and IEC 61513 are quite different from IEEE 603 but together they address most, if not all, of the requirements given in IEEE 603.
3. Within IEC, IEC 61513 is considered to be a nuclear specific implementation of IEC 61508, the IEC industrial safety guides. IEC 61508 has seven parts.

Safety Fundamentals

<table>
<tr><td>Non Safety</td><td colspan="3">Systems Important to Safety</td><td>Non Safety</td></tr>
<tr><td></td><td colspan="3">Safety Systems</td><td></td></tr>
<tr><td colspan="2">P61226
Categorization and classification of I&C and electrical systems</td><td colspan="2">IEC 61226:2020
Categorization of function and classification of systems</td></tr>
<tr><td>Reg Guide 1.201 Rev. 1 2006
Guidelines for categorizing systems, structures, and components according to safety significance</td><td>IEEE 1819-2016
Risk-informed categorization of electrical and electronic equipment</td><td colspan="2">IEC TR 61838:2009
Use of probabilistic safety assessment for the classification of functions</td></tr>
<tr><td>Reg Guide 1.75 2005
Criteria for independence of electrical safety systems</td><td>IEEE 384-2018
Independence of 1E equipment and circuits</td><td colspan="2">IEC 60709:2018
Separation</td></tr>
<tr><td>Reg Guide 1.53 2003
Application of the single failure criterion</td><td>IEEE 379-2014
Application of the single failure criterion</td><td colspan="2"></td></tr>
<tr><td>Reg Guide 1.22 1972
Periodic testing of protections system actuations and functions</td><td rowspan="2">IEEE 338-2022
Criteria for periodic surveillance testing</td><td colspan="2" rowspan="2">IEC 60671:2007
Surveillance testing</td></tr>
<tr><td>Reg Guide 1.118 1995
Periodic testing of electrical power and protection system</td></tr>
<tr><td colspan="2"></td><td colspan="2">IEC 62340:2007
Requirements for coping with common cause failure</td></tr>
<tr><td colspan="4">IEC/IEEE 63160
Common cause failure, system failure, systems analysis and diversity</td></tr>
<tr><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td colspan="2"></td><td>Reg Guide 1.81 1975
Shared emergency and shutdown electric systems for multi unit plants</td><td></td></tr>
</table>

Notes RG 1.81 is concerned with system interactions. Sharing of onsite power systems at multi-unit power plant sites generally results in a reduction in the number and capacity cf the onsite power sources to levels below those required for the same number of units located at separate sites. The reduced capacity could cause undesirable interactions. Examples of such interactions are (1) the interconnection of engineered safety feature (ESF) control circuits of each unit such that failures and maintenance or testing operations in one unit affect the availability of ESF in other units, (2) coordination required between unit operators in order to cope with an accident in one unit and safe shutdown of the remaining unit(s), and (3) system overload conditions as a consequence of real accident in a unit coincident with a false or spurious accident signal in another unit.

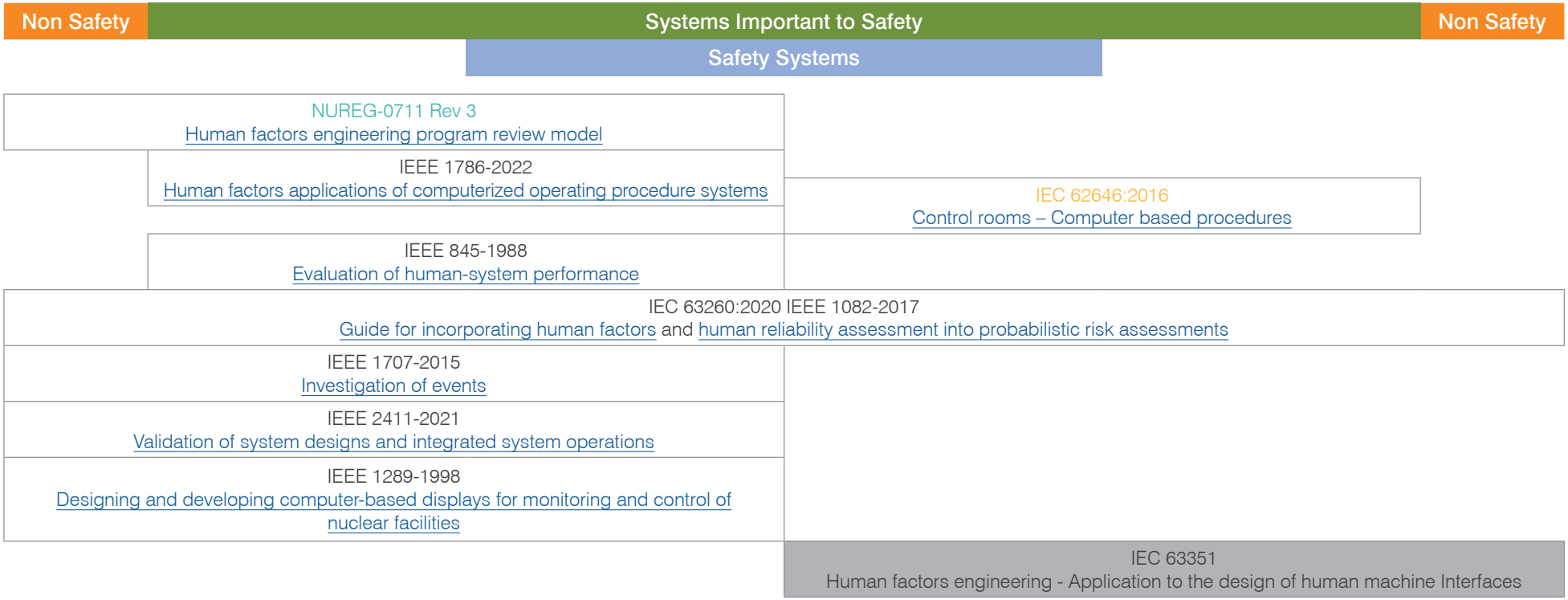
Reliability, Hazards Analysis, and Operational Programs



Notes

IEC 60812 Was developed by IEC TC 56 but the TC45A standard 61226 includes it a normative reference.

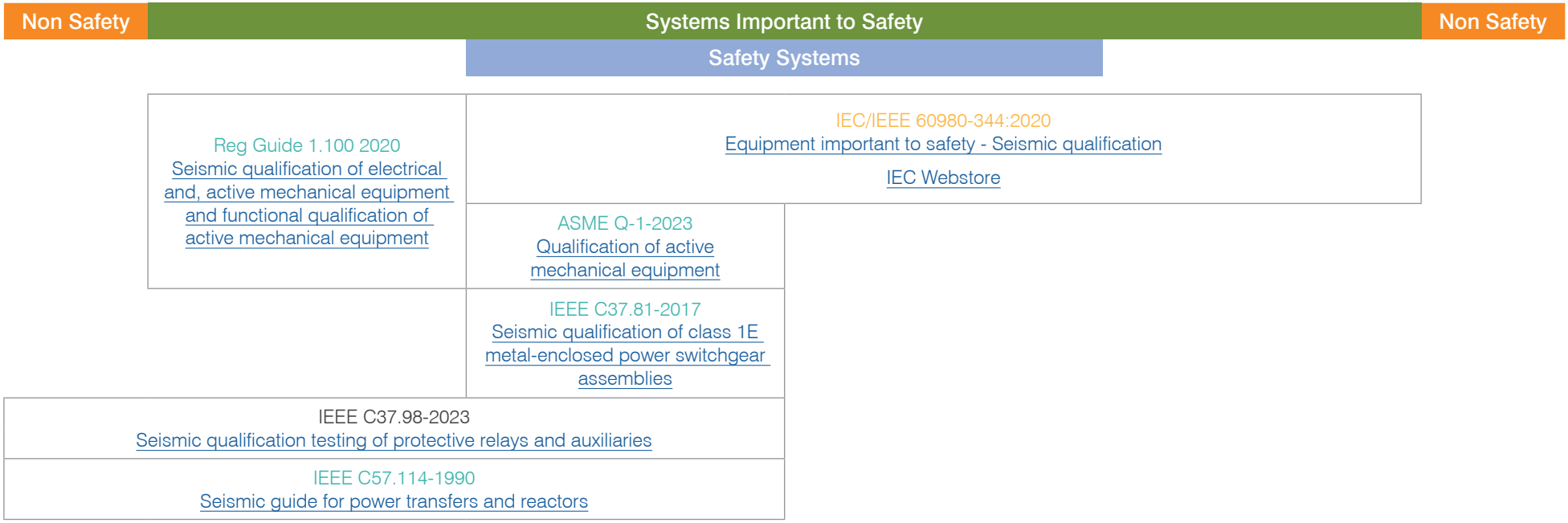
Human Factors Engineering



Qualification of Electrical and Electronic Equipment

Non Safety	Systems Important to Safety		Non Safety
	Safety Systems		
Reg Guide 1.89 2023 Environmental qualification of electrical equipment	IEC/IEEE 60780-323:2016 Electrical equipment important to safety-qualification IEC Webstore		
Reg Guide 1.209 2007 Qualification of safety related-computer based I&C			
Reg Guide 1.211 2009 Qualification of safety related cables and field splices	IEEE 383-2015 Qualification of electrical cables and splices		
	Reg Guide 1.156 2023 Qualification of connection assemblies	IEEE 572-2019 Qualification of 1E connection assemblies	
Reg Guide 1.40 2010 Qualification of continuous duty safety related motors	IEEE 334-2006 Qualifying continuous duty 1E motors		
Reg Guide 1.73 2013 Qualification tests for safety related actuators	IEEE 382-2019 Qualification of safety related actuators		
	IEEE 627-2019 Qualification of equipment		
		IEEE C37.82-2017 Qualification of switchgear assemblies	
		IEEE C37.105-2010 Qualification protective relays and auxiliaries	
		IEEE 638-2013 Qualification of transformers	
Reg Guide 1.213 2009 Qualification of safety-motor control centers	IEEE 649-2006 Qualifying motor control centers		
Reg Guide 1.210 2008 Qualification of battery chargers and inverters	IEEE 650-2017 Qualification of static batteries, chargers, inverters, and uninterruptible power supplies		
Reg Guide 1.158 2018 Qualification of vented lead acid storage batteries	IEEE 535-2022 Qualification of lead acid storage batteries		
		IEEE 420-2013 Design and qualification of control boards panels, and racks	
		IEEE 1682-2023 Qualification of fiber optic cables, and optical fiber splices for use in safety systems	

Seismic Qualification



Lightning Protection

Non Safety | Systems Important to Safety | Non Safety

Safety Systems

Reg Guide 1.204 2005 Lightning Protection	IEEE 665-1995 Generating station grounding
	IEEE 1050-2004 Instrument and control equipment grounding
	IEEE 666-2007 Design guide for electric power service systems
	IEEE C62.23-2017 Surge Protection

Notes Lightning protection requirements apply to all systems - including non-safety systems.
Reg Guide 1.204 endorses IEEE 665-1991, IEEE 1051-1996, IEEE 666-1991, and IEEE C62.23-2001.
IEEE 663 and IEEE 1050 are endorsed by both Reg Guide 1.180 and Reg Guide 1.204 hence they are shown twice in this document.

Human Factors Engineering - Control Rooms

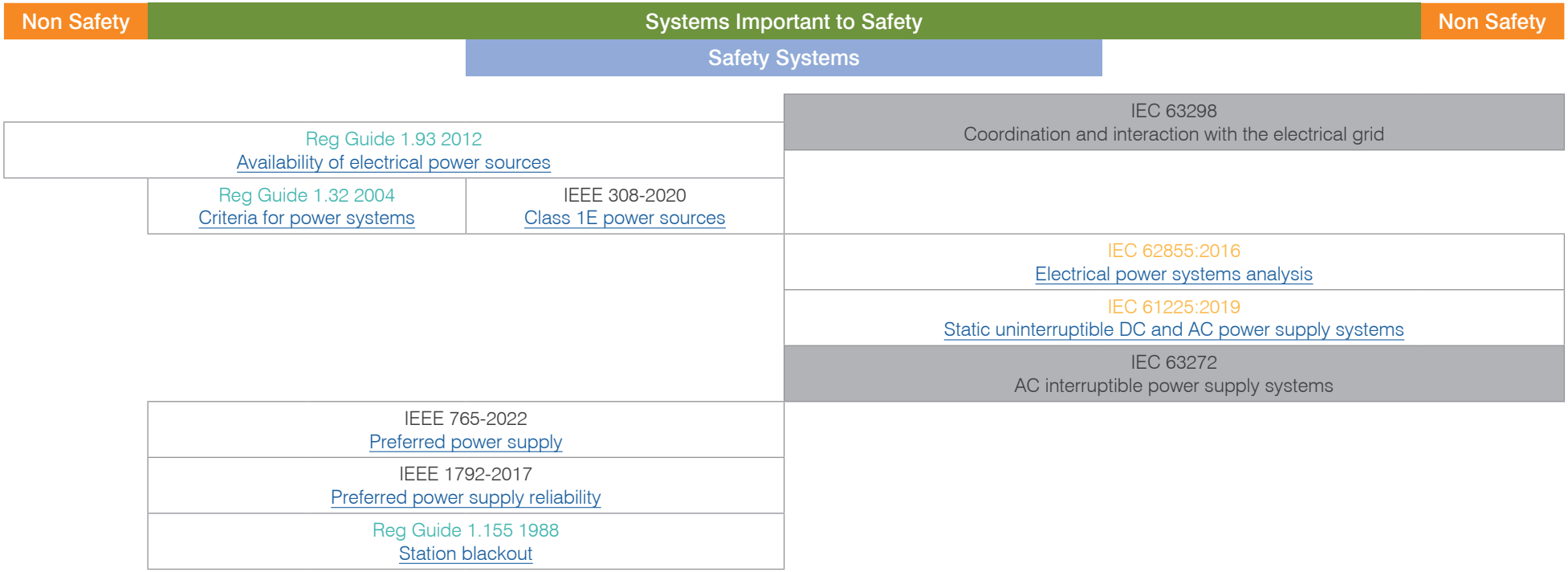
Non Safety	Systems Important to Safety		Non Safety
	Safety Systems		
NUREG-0700 R3 2020 Human system interface design review guidelines	IEEE 1023-2020 Recommended practice for the application of human factors engineering to systems, equipment, and facilities	IEC TR 63214:2019 Control rooms-Human factors engineering	
		IEC 61839:2000 Design of control rooms - Functional analysis and assignment	
	IEEE 567-1980 Trial-use guide criteria for the design of the control room complex	IEC 60964:2018 Control rooms - Design	
		IEC 61771:1995 Main control room - Verification and Validation of design	
	IEEE 1289-1998 Guide to the application of human factors engineering in the design of computer-based monitoring and control displays	IEC 61772:2009 Control rooms - Application of visual display units (VDUs)	
		IEC 61227:2008 Control rooms - Operator controls	
		IEC 62241:2004 Main control room - Alarm functions and presentation	
			IEC 60965:2016 Supplementary control room for reactor shutdown without access to the main control room
		IEC 63435 Operational management data processing and operator supporting system	

Electromagnetic Interference

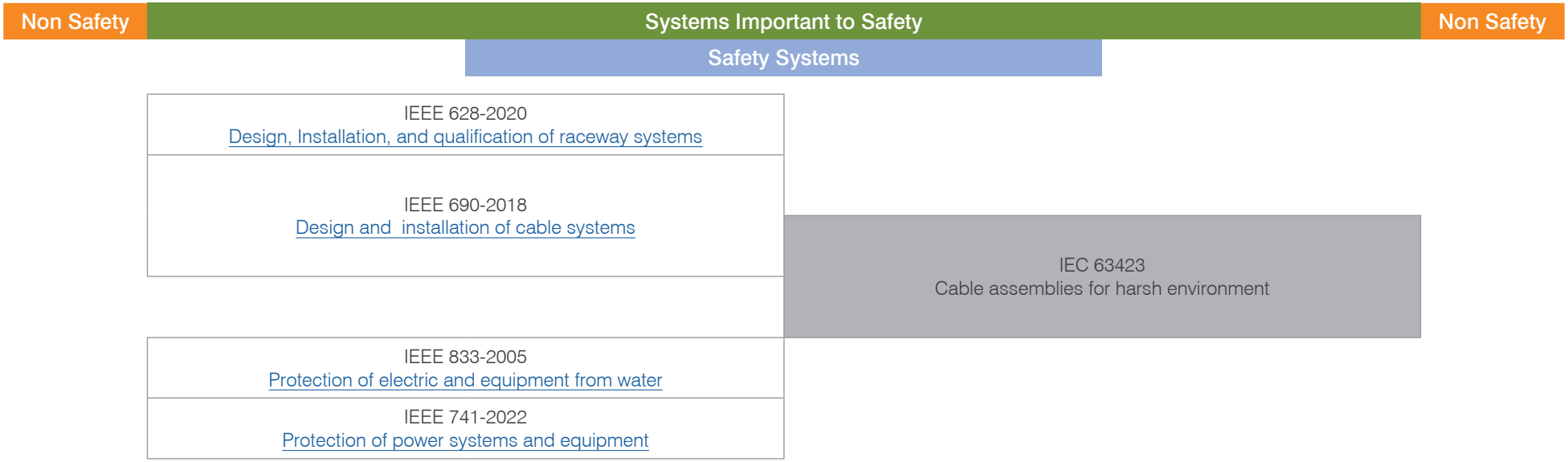
Non Safety	Systems Important to Safety		Non Safety
	Safety Systems		
Reg Guide 1.180 2019 Evaluating electromagnetic and radio frequency Interference in safety instrumentation and control systems	IEEE P2425 Electromagnetic compatibility testing of electrical, instrumentation, and control	IEC 62003:2020 Requirements for electromagnetic compatibility	
	IEC 61000 Series Electromagnetic compatibility		
	MIL-STD-461G 2015 Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment		
	IEEE C62.41-1991 Surge voltages in Low-voltage AC power circuits		
	IEEE C62.45-2002 Surge testing for equipment connected to low voltage AC power circuits		
	IEEE 473-1985 Electromagnetic site survey		
	IEEE 518-1982 Installation of electrical equipment to minimize noise inputs to controllers from external sources		
	IEEE 1050-2004 Instrument and control equipment grounding		
	IEEE 665-1995 Generating station grounding		

Notes Reg Guide 1.180 endorses MIL-STD-461E, and IEEE 1050-1996
Although the Reg Guide deals only with safety systems, all plant EMI sources must be dealt with to protect against safety system failure.
IEC 61000 series has 113 parts. Reg. Guide 1.180 and IEEE 62003 identify the specific parts to be considered.
IEEE 665 and IEEE 1050 are endorsed by both Reg Guide 1.180 and Reg Guide 1.204 hence they are shown twice in this document.

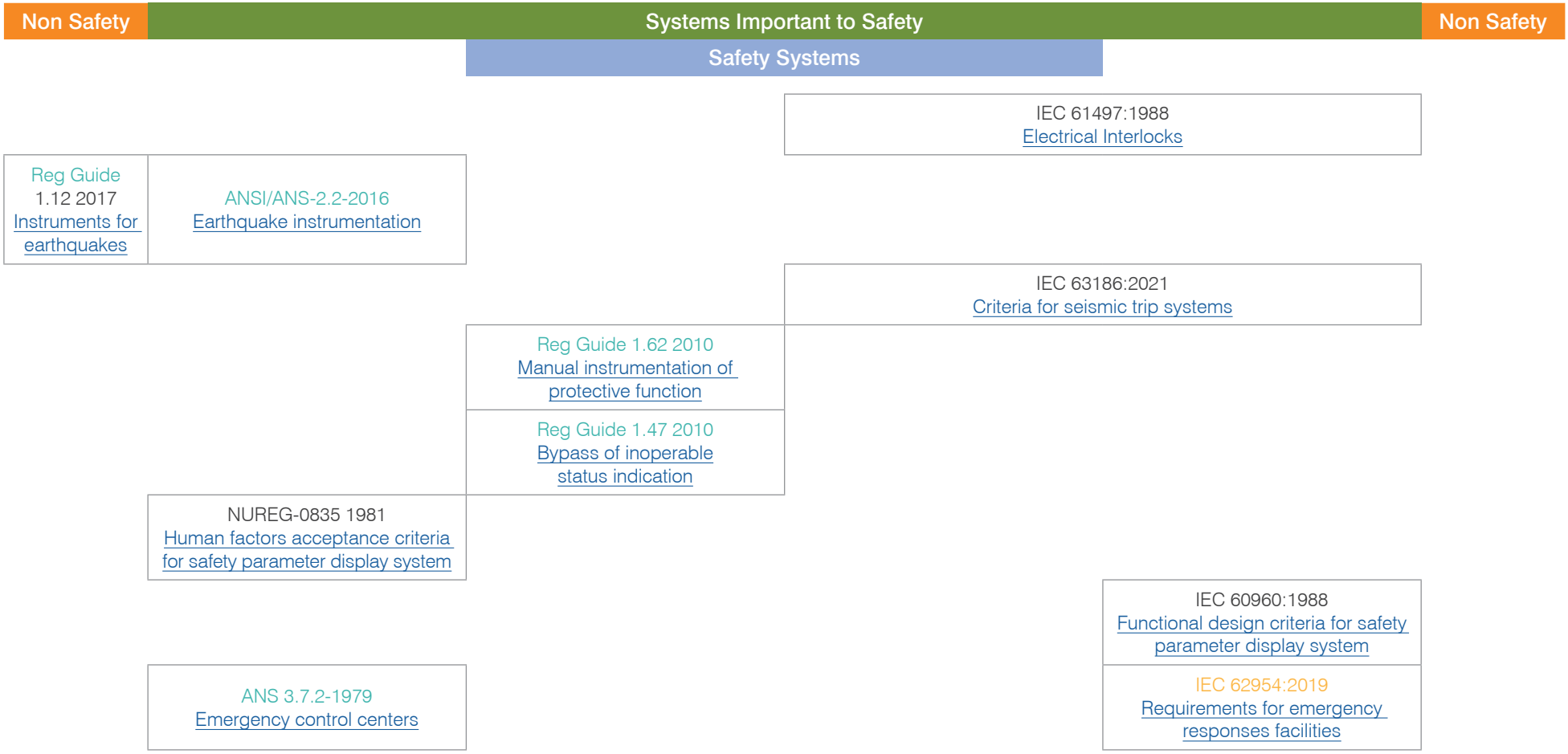
Electrical Systems



Electrical Supporting Systems



I&C Systems Outside of Containment



In-Containment Monitoring

Non Safety	Systems Important to Safety	Non Safety
	Safety Systems	
Reg Guide 1.133 1981 Loose-part detection program for the primary system of LWRs		IEC 60988:2009 Acoustic monitoring system for detection of loose parts
		IEC 61502:1999 PWR - Vibration monitoring of internal structures
		IEC 60910:2022 Containment monitoring instrumentation for early detection of developing deviations from normal operation in LWRs
		IEC 60911:1987 Measurements for monitoring adequate cooling within the PWR Core of PWR
		IEC 61343:1996 Measurements for monitoring adequate cooling within BWR cores
Reg Guide 1.45 2008 Guidance on monitoring and responding to reactor coolant system leakage		IEC 61250:1994 Detection of leakage in coolant systems
ANSI/ISA 67.03:1982 LWR coolant pressure boundary and leak detection		
		IEC 62117:1999 PWR-Monitoring adequate cooling within the core during shutdown

Security

Non Safety | Systems Important to Safety | Non Safety

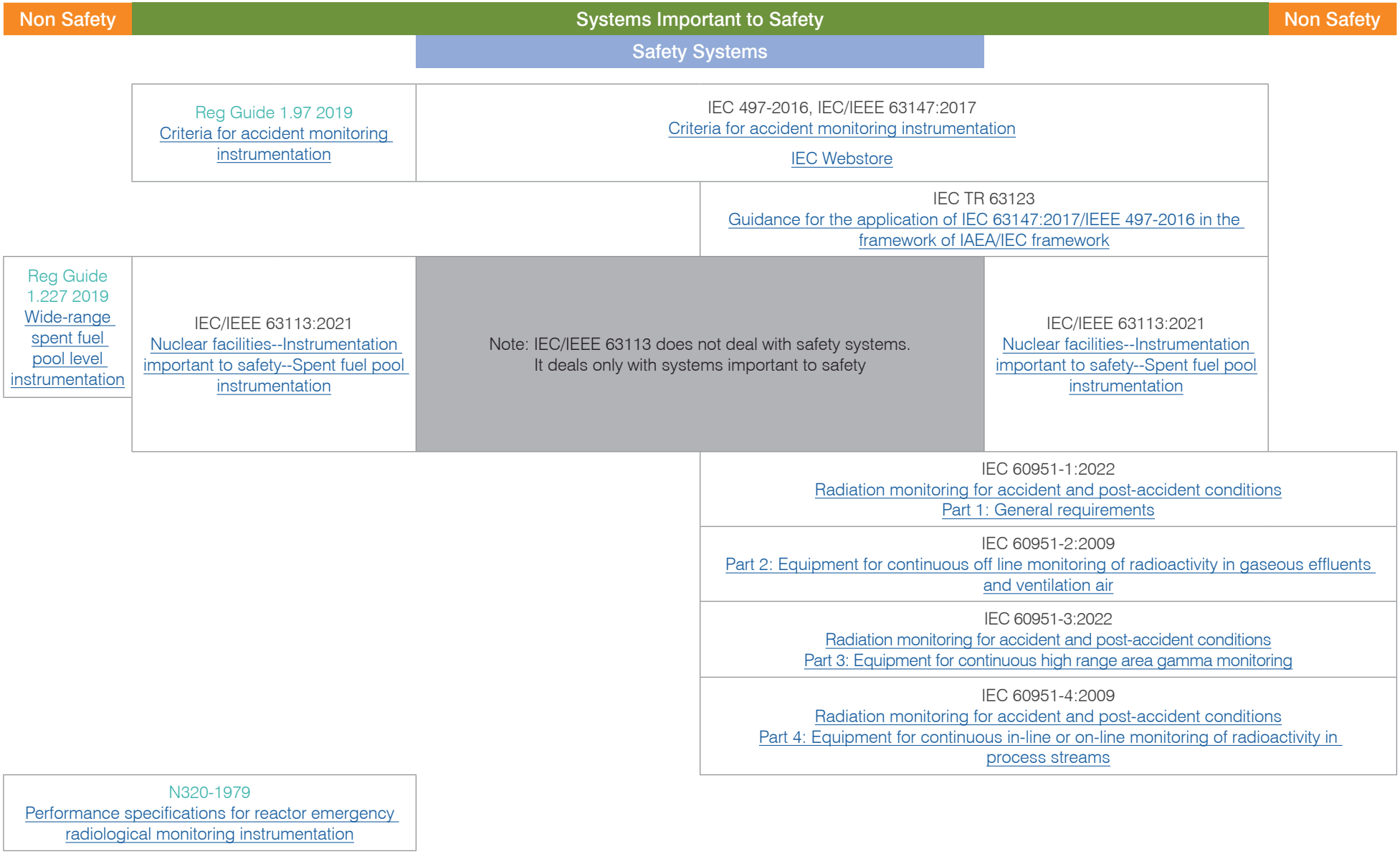
Safety Systems

Reg Guide 5.71 2023 Cyber security programs for nuclear power reactors	IEC 62645:2019 Cybersecurity requirements
	IEC 62859:2016+AMD1:2-19 CSV Requirements for coordinating safety and security
Reg Guide 5.74 2015 Managing the safety/security interface	IEC 63096:2020 Security Controls

IEC TR 63415
Use of formal security models for I&C security architecture design and assessment

IEEE 692-2013
Criteria for security systems

Accident Monitoring

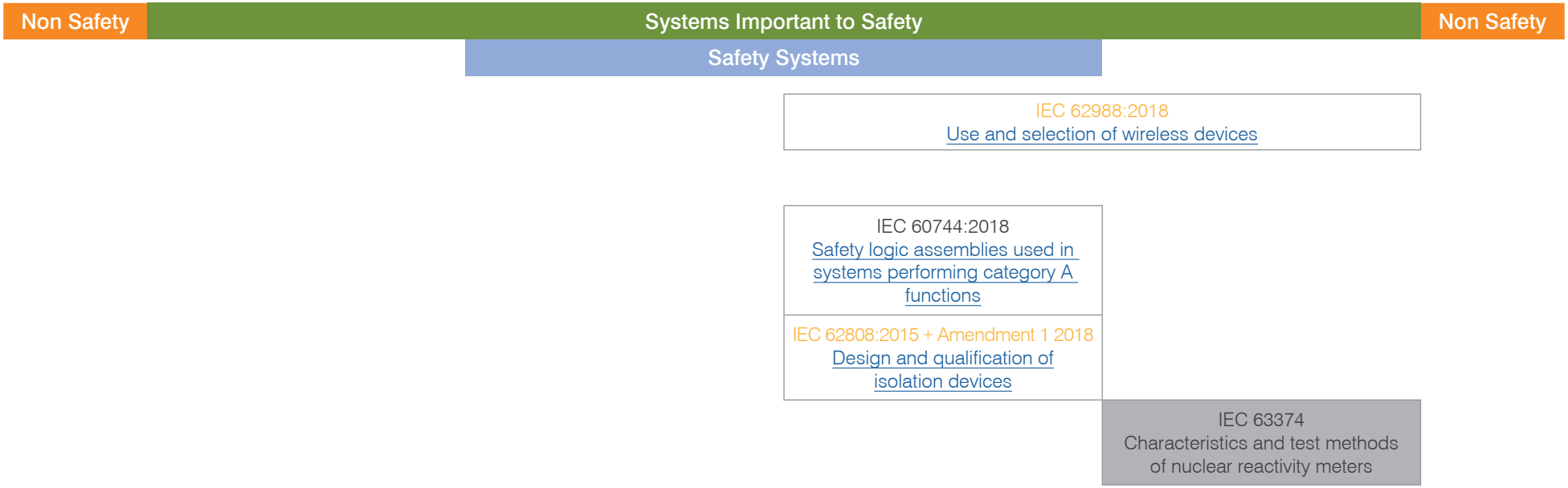


Electrical Equipment

Non Safety	Systems Important to Safety			Non Safety
	Safety Systems			
	Reg Guide 1.63 1987 Electrical penetration assemblies in containment structures	IEEE 317-2013 Electrical penetration assemblies in containment structures	IEC 60772:2018 Electrical penetration assemblies in containment structures	
Reg Guide 1.9 2007 Application and testing diesel generators	IEEE 387-2017 Criteria for diesel generating units applied as standby power supplies		IEC-IEEE 63332-387 Diesel generator units applied as standby power sources	
	IEEE 2420-2019 Combustion turbine generator units applied as standby power supplies			
Reg Guide 1.128 2007 Design and installation of vented lead-acid storage batteries	IEEE 484-2019 Design and installation of vented lead-acid Batteries			
Reg Guide 1.212 2023 Sizing of lead-acid batteries	IEEE 485-2020 Sizing of lead acid batteries			
Reg Guide 1.129 2023 Maintenance, testing and replacement of vented lead-acid batteries	IEEE 450-2020 Maintenance, testing, and replacement of vented lead-acid batteries			
IEEE 1106-2015 Installation, maintenance, testing and replacement of vented nickel cadmium batteries				
IEEE 1290-2015 Motor operated valve motor application, protection, control and testing				
Reg Guide 1.106 2012 Thermal overload protection for electric motors on-motor operated valves				

Notes IEEE 387-2017 is under revision with the intent of producing an IEEE/IEC dual logo standard.

I&C Components



Sensors

Non Safety | Systems Important to Safety | Non Safety

Safety Systems

IEC 60515:2007
Radiation detectors - Characteristics and test methods

IEC 60568:2006
In-core instrumentation for neutron fluence rate (flux) measurements

IEC 61468:2021
In-core instrumentation - characteristics and test methods of self powered neutron detectors

IEC 61501:1998
Wide range neutron fluence rate meter - mean square voltage method

IEC 60737:2010
Temperature sensors (in-core and primary coolant circuit) - characteristics and test methods

IEC 62397:2022
Resistance temperature detectors

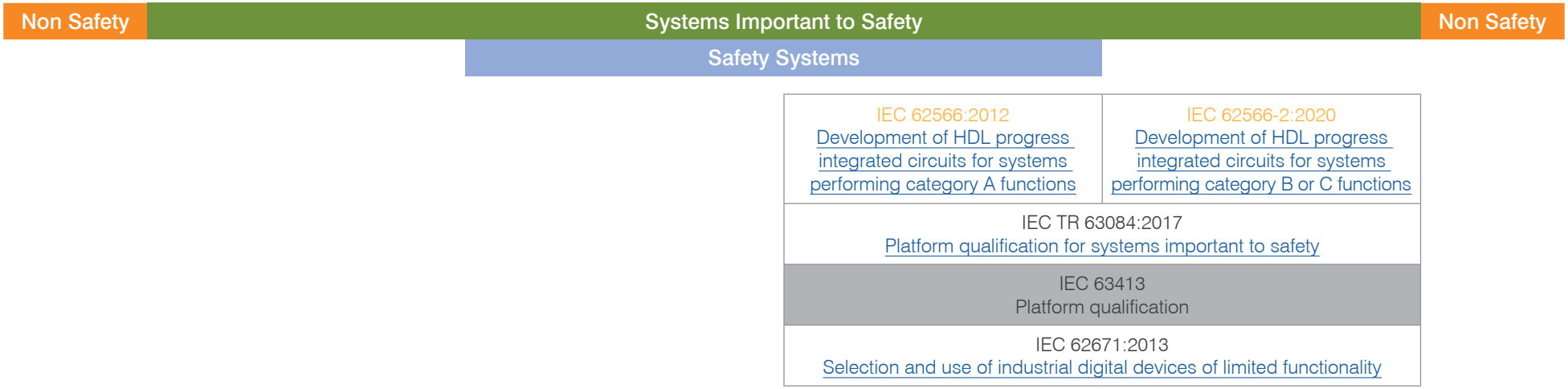
IEC 62651:2013
Thermocouples: characteristics and test methods

IEC 62887:2018
Pressure transmitters: characteristics and test methods

Development of Digital Components and Systems

Non Safety	Systems Important to Safety			Non Safety
		Safety Systems		
			IEC 60987:2021 Instrumentation and control important to safety - hardware requirements	
Reg Guide 1.152 2023 Use of computers in safety systems	IEEE 7-4.3.2-2016 Criteria for programmable digital devices in safety systems		IEC 61500:2018 Data communications in systems performing category A functions	IEC 62138:2018 Software aspects for computer based systems performing category B or C functions
Reg Guide 1.168 2013 Verification, validation, reviews and audits for digital computer software used in safety systems	IEEE 1012-2016 System and software verification and validation		IEC 60880:2006 Software aspects for computer based category A functions	
	IEEE 1028-2008 Standard for software reviews and audits			
Reg Guide 1.169 2013 Configuration management plans for software used in safety systems	IEEE 828-2012 Configuration management systems and software engineering			
Reg Guide 1.170 2013 Test documentation for software used in safety systems	IEEE 829-2008 Software and system test documentation			
Reg Guide 1.172 2013 Requirements specifications for software and complex electronics used in safety systems	IEEE 830-1998 Software requirement specifications			
Reg Guide 1.173 2013 Developing software lifecycle processes for software used in safety systems	IEEE 1074-2006 Developing a software product lifecycle process			
Reg Guide 1.250 2022 Dedication of commercial-grade digital I&C items for use in nuclear power plants	NEI 17-06 Revision 1 Guidance on Using IEC 61508 SIL Certification to Support the Acceptance of Commercial Grade Digital Equipment for Nuclear Safety Related Applications			

Digital Platforms



Radiation Monitoring - Systems and Effluents

Non Safety | Systems Important to Safety | Non Safety

Safety Systems

IEC 62705:2022
Radiation monitoring systems

IEC 61504:2017
Centralized systems for continuous monitoring of radiation

IEC 60761-1:2002
Equipment for continuous monitoring of radioactivity in gaseous effluents

IEC 60761-2:2002
Requirements for radioactive aerosol monitors including transuranic aerosols

IEC 60761-3:2002
Requirements for radioactive noble gas monitors

IEC 60761-4:2002
Requirements for radioactive iodine monitors

IEC 60761-5:2002
Requirements for tritium monitors

IEC 60861:2006
Equipment for monitoring radionuclides in liquid effluents and surface waters

IEC 60532:2010
Installed dose rate meters, warning assemblies and monitors - and gamma radiation of energy between 50 KeV and 7 MeV

IEC 60768:2009
Equipment for continuous in-line or on-line monitoring of radioactivity in process streams for normal and incident conditions

IEC 61031:2020
Design, location and application criteria for installed area gamma radiation dose rate monitoring equipment for normal operation and anticipated occurrences

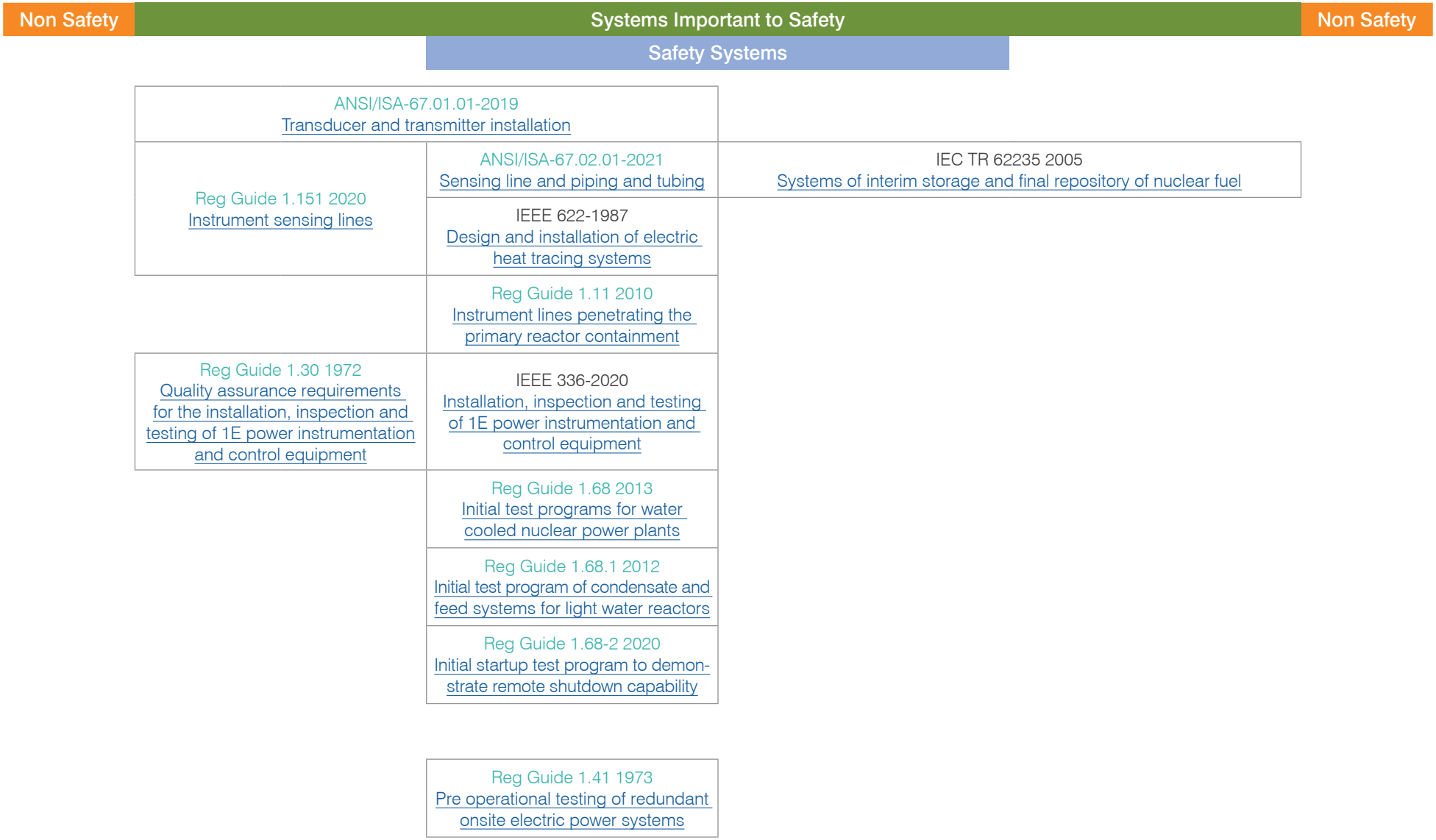
IEEE/ANS N42.18-1980
Specification and performance of on-site instrumentation for continuously monitoring radioactive effluents

IEC Webstore

ANSI/ANS/HPSSC-6.8.1-1981
Location and design criteria for area radiation monitoring systems for light water nuclear reactors

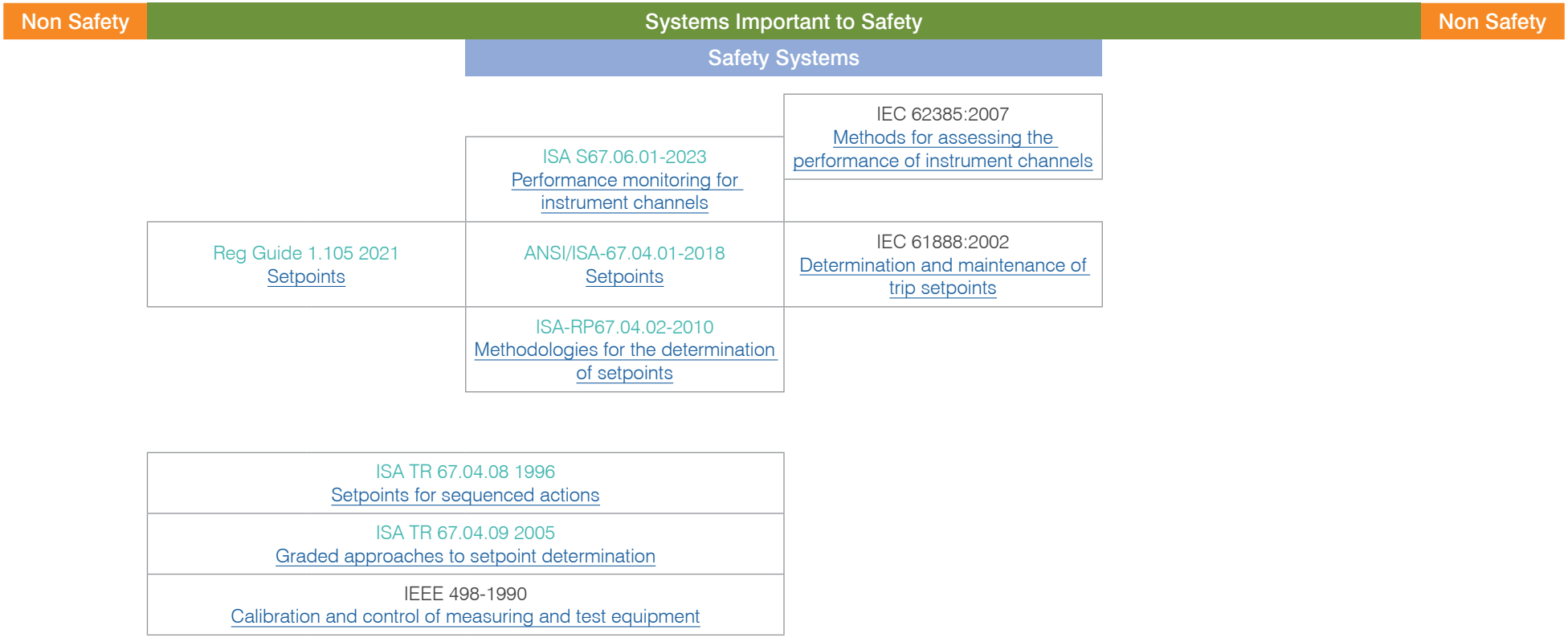
Notes Radiation monitoring standards for accident and post accident conditions are listed on the accident monitoring sheet.

Equipment Installation

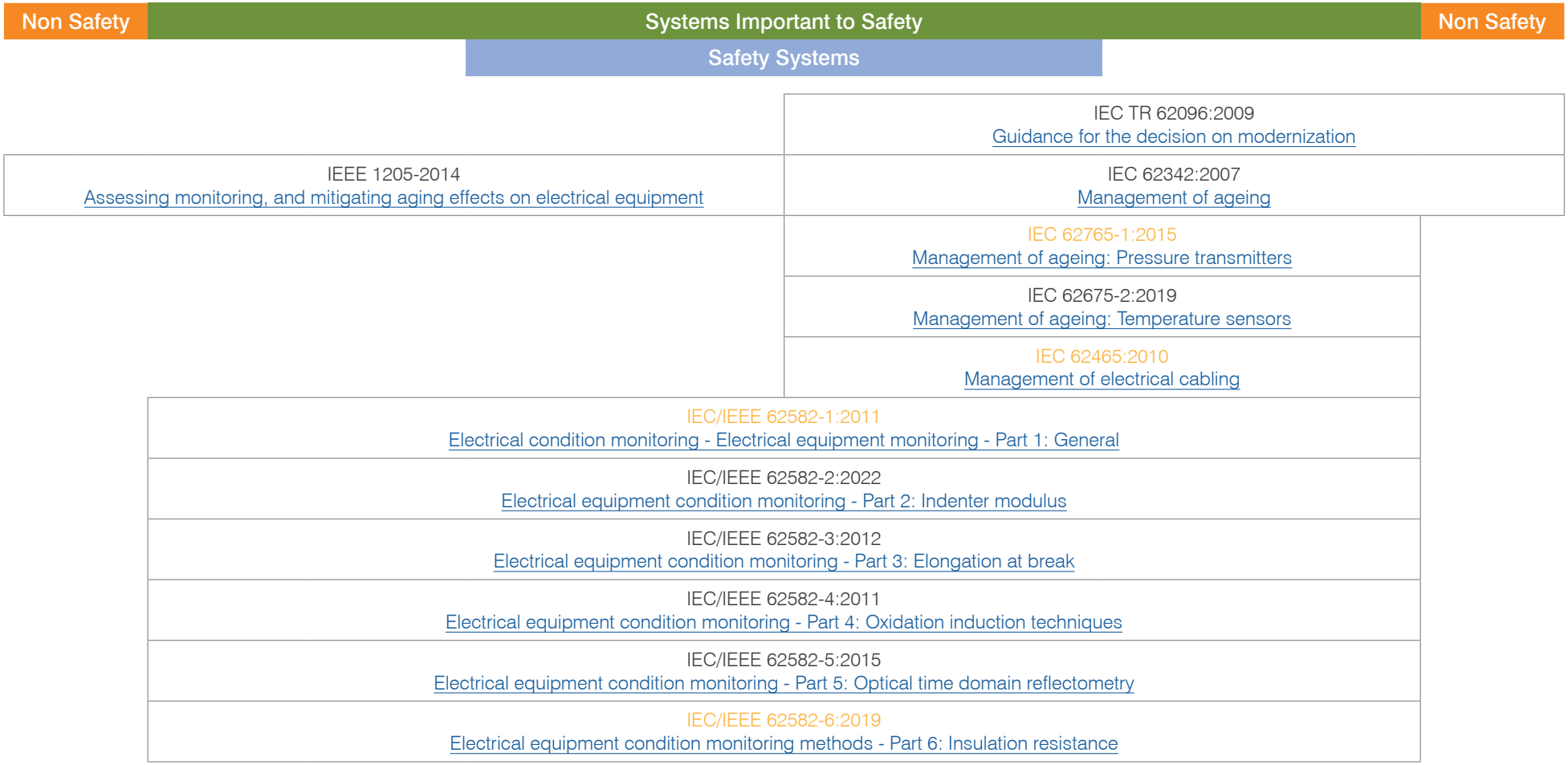


Notes Reg Guide 1.151 endorses ISA-67.02.02 1999
Reg Guide 1.30 endorses ANSI/IEEE N45.2.4-1972 which has been succeeded by IEEE 336-19

Instrument Performance and Setpoint Analysis



Aging Management and Modernization



Notes The IEC 62582 series may apply to any components that involve electrical insulation.

Archaic but Possibly Useful for Non-Light Water Reactors or Small Modular Reactors

IEC 60231:1967 General principles of nuclear reactor instrumentation
IEC 60231A:1969 General principles of nuclear reactor instrumentation
IEC 60231B:1972 Principles of instrumentation of direct cycle boiling water power reactors
IEC 60231C:1974 Instrumentation of gas-cooled graphite-moderated reactors
IEC 60231D:1975 Principles of instrumentation for pressurized water reactors
IEC 60231E:1977 Principles of instrumentation of high temperature indirect cycle gas-cooled power reactors (HTGR)
IEC 60231F:1977 Principles of instrumentation Steam generating, direct cycle, direct cycle, heavy-water moderated reactors
IEC 60231G:1977 Liquid metal fast cooled reactors

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This document brings together the nuclear power plant instrumentation & control and electrical system standards used by the Institute of Electrical and Electronics Engineers (IEEE) and International Electrotechnical Commission (IEC) communities. Both sets of standards are used in different parts of the world. This document is intended as a starting point for identifying similarities and conflicts between the two sets of standards to facilitate harmonization.

This document consists of tables that show the IEC and IAEA electrical and I&C nuclear standards alongside the corresponding IEEE and NRC documents. The tables also show documents that have no equivalent.

The tables provide a basic view of the correspondence between related standards without offering further analysis or conclusions. Clicking in any box in the tables will take the user to further information given by the responsible standard organization. In the case of NRC, the user will be taken directly to the documents in question. This document will be regularly revised following future evolutions and updates of the relevant I&C standards.

The Cooperation in Reactor Design Evaluation and Licensing (CORDEL) Working Group promotes the development of a worldwide regulatory environment where internationally-accepted standardized reactor designs, certified and approved by a recognised competent authority in the country of origin, can be widely deployed without major design changes due to national regulations.