



Appendix D
Nuclear Regulatory Commission Regulatory Guides (RG) for
Electrical and I&C Systems and Components

- RG 1.6 Independence Between Redundant Standby (Onsite) Power Sources and Between Their Distribution Systems
- RG 1.9 Selection, Design, Qualification and Testing of Emergency Diesel-Generator Units Used as Class 1E Onsite Electric Power Systems at Nuclear Power Plants (IEEE 387)
- RG 1.11 Instrument Lines Penetrating Primary Containment
- RG 1.30 Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment (ANSI N45.2.4/IEEE 336)
- RG 1.32 Criteria for Safety-Related Electric Power Systems for Nuclear Power Plants (IEEE 308)
- RG 1.40 Qualification Tests of Continuous-Duty Motors Installed Inside the Containment of Water-Cooled Nuclear Power Plants (IEEE 334)
- RG 1.47 Bypassed and Inoperable Status Indication for Nuclear Power Plant Safety Systems
- RG 1.53 Application of the Single-Failure Criterion to Nuclear Power Plant Protection Systems (IEEE 279 and IEEE 379)
- RG 1.63 Electric Penetration Assemblies in Containment Structures for Nuclear Power Plants (IEEE 317)
- RG 1.68 Initial Test Programs for Water-Cooled Nuclear Power Plants
- RG 1.73 Qualification Tests of Electric Valve Operators Installed Inside the Containment of Nuclear Power Plants
- RG 1.75 Physical Independence of Electric Systems (IEEE 384)
- RG 1.79 Preoperational Testing of Emergency Core Cooling Systems for Pressurized Water Reactors
- RG 1.81 Shared Emergency and Shutdown Electric Systems for Multi-Unit Nuclear Power Plants
- RG 1.89 Qualification of Class 1E Equipment for Nuclear Power Plants (IEEE 323)
- RG 1.97 Criteria For Accident Monitoring Instrumentation for Nuclear Power Plants
- RG 1.100 Seismic Qualification of Electrical and Mechanical Equipment for Nuclear Power Plants
- RG 1.105 Instrument Setpoints (ISA S67.04)
- RG 1.106 Thermal Overload Protection for Electric Motors on Motor-Operated Valves
- RG 1.118 Periodic Testing of Electric Power and Protection Systems
- RG 1.128 Installation Design and Installation of Large Lead Storage Batteries for Nuclear Power Plants (IEEE 484)
- RG 1.129 Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Nuclear Power Plants (IEEE 450)
- RG 1.131 Qualification Tests of Electric Cables, Field Splices, and Connections for Light-Water-Cooled Nuclear Power Plants (IEEE 383) (See RG 1.211)
- RG 1.151 Instrument Sensing Lines (ISA S67.02)
- RG 1.152 Criteria for Digital Computers in Safety Systems of Nuclear Power Plants
- RG 1.153 Criteria for Safety Systems
- RG 1.155 Station Blackout



- RG 1.168 Verification, Validation, Reviews, and Audits for Digital Computer Software Used in Safety Systems of Nuclear Power Plants
- RG 1.169 Configuration Management Plans for Digital Computer Software Used in Safety Systems of Nuclear Power Plants
- RG 1.170 Software Test Documentation for Digital Computer Software Used in Safety Systems of Nuclear Power Plants
- RG 1.171 Software Unit Testing for Digital Computer Software Used in Safety Systems of Nuclear Power Plants
- RG 1.172 Software Requirements Specifications for Digital Computer Software Used in Safety Systems of Nuclear Power Plants
- RG 1.173 Developing Software Life Cycle Processes for Digital Computer Software Used in Safety Systems of Nuclear Power Plants
- RG 1.180 Guidelines for Evaluating Electromagnetic and Radio-Frequency Interference in Safety-Related Instrumentation and Control Systems
- RG 1.204 Guidelines for Lightning Protection of Nuclear Power Plants
- RG 1.209 Guidelines for Environmental Qualification of Safety-Related Computer-Based Instrumentation and Control Systems in Nuclear Power Plants
- RG 1.210 Qualification of Safety-Related Battery Chargers and Inverters for Nuclear Power Plants
- RG 1.211 Qualification of Safety-Related Cables and Field Splices for Nuclear Power Plants (IEEE 383)
- RG 1.212 Sizing of Large Lead-Acid Storage Batteries (IEEE 485)
- RG 1.213 Qualification of Safety-Related Motor Control Centers for Nuclear Power Plants