

APPENDIX C: CHAPTER 21 REFERENCE LISTING

Most recent document revision (including revised document numbering and/or titles) applies unless otherwise stated. *Most national standards are available to LANL personnel via links; others must purchase.*

[10 CFR 830](#), *Nuclear Safety Management*

[10 CFR 835](#), *Occupational Radiation Protection*

[48 CFR 970-5223-1](#), *Integration of Environment, Safety, and Health into Work Planning and Execution*

[ANSI/ANS-10.7](#), *Non-Real-Time, High-Integrity Software for the Nuclear Industry – Development Requirements*

[ASME NQA-1-2008/NQA-1A-2009](#), *Quality Assurance Requirements for Nuclear Facility Applications, Part I and Part II*

[ASME NQA-1-2015 Part III, Subpart 3.2-2.14](#), *Quality Assurance Requirements for Commercial Grade Items and Services, Commercial Grade Computer Programs, and Software Services*

[Certified Software Quality Engineer Handbook](#), L. Westfall, American Society of Quality Pres.

DOE

[DOE O 414.1D](#), *Quality Assurance*

[DOE Safety Software Quality Assurance Central Registry](#)

[DOE G 414.1-4](#), *Safety Software Guide for Use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1C, Quality Assurance (Revision A pending)*

[DOE P 450.4A](#), *Integrated Safety Management Policy*

[DOE SQAS21.01.00-1999](#), *Software Risk Management a Practical Guide*

[DOE-STD-1195](#), *Design of Safety Significant Safety Instrumented Systems Used at DOE Nonreactor Nuclear Facilities*

[EPA/100/K-09/003](#), *Guidance on the Development, Evaluation, and Application of Environmental Models*, www.epa.gov/crem

IAEA TR. No. 397, *Quality Assurance for Software Important to Safety*, IAEA, 2000

IEEE

[ANSI/IEEE Std 7-4.3.2-2010](#), *IEEE Standard Criteria for Digital Computers in Safety Systems of Nuclear Power Generating Stations*

[ANSI/IEEE Std 828](#), *IEEE Standard for Configuration Management in Systems and Software Engineering*

[ANSI/IEEE Std 26514](#), *Systems and Software Engineering—Requirements for Designers and Developers of User Documentation*

[ANSI/IEEE Std 29148](#), *Systems and Software Engineering – Life Cycle Processes – Requirements Engineering*

[IEEE Std 344](#), *Standard for Seismic Qualification of Equipment for Nuclear Power Generating Stations*

[IEEE Std 829](#), *IEEE Standard for Software and System Test Documentation*

[IEEE Std 830](#), *IEEE Recommended Practice for Software Specifications*

[IEEE Std 1012](#), *IEEE Standard for System and Software Verification*

[IEEE Std 1016](#), *IEEE Standard for Information Technology – System Design – Software Design Descriptions*

[IEEE Std 1016.1](#), *IEEE Guide to Software Design Descriptions*

[IEEE Std 1028](#), *IEEE Standard for Software Reviews and Audits*

[IEEE Std 1666](#), *IEEE Standard for Standard System C Language Reference Manual*

[IEEE Std 12207](#), *Systems and Software Engineering – Software Life Cycle Processes*

[ISO/IEC/IEEE 24765](#), *Systems and Software Engineering – Vocabulary*

[ISO/IEC/IEEE 29148](#), *Systems and Software Engineering-Life Cycle Processes-Requirements Engineering*

[ANSI/ISA S84.00.01](#), *Functional Safety: Safety Instrumented Systems for the Process Industry Sector*

LANL (internal-only unless noted). Contact the chapter POC for assistance in obtaining LANL documents.

[AP-341-402](#), *Engineering Document Management in Operating Facilities*

[AP-341-405](#), *Identification and Control of Technical Baseline, Variances, Alternate Methods, and Clarifications in Operating Facilities*

1 Section SOFT-GEN: General Software Requirements

Rev. 0, 06/23/16

[AP-341-502](#), Management Level Determination and Identification of Quality Assurance and Maintenance Requirements

[AP-341-504](#), Temporary Modification Control

[AP-341-507](#), SSC Control Software Change Package

[AP-341-510](#), Field Walk-down, Data Gathering, and Inspections

[AP-341-519](#), Design Revision Control

[AP-341-605](#), Calculations

[AP-341-601](#), Functions and Requirements Document

[AP-341-602](#), Requirements and Criteria Document (RCD)

[AP-341-611](#), System Design Descriptions

[AP-341-613](#), Instrumentation Set Point Control

[AP-341-616](#), Technical Baseline Change During Design

[AP-341-620](#), Review of LANL Produced Design Documents

[AP-341-621](#), Design Authority Technical Review

[AP-341-622](#), LANL Review of Designs Produced by External Agencies

[AP-341-703](#), Commercial Grade Dedication

[AP-341-801](#), Post Modification/Post Maintenance Testing

[AP-341-802](#), System Health Reporting

[AP-341-901](#), Performing Vital Safety System Assessments

[AP-350-406](#), Startup and Commissioning

[ASM 3400.00.041](#), Goods or Services Requiring Special Review/Approval

[ASM Website](#)

[Conduct of Operations Resources](#)

[EPP-COOP-006](#), LANL COOP [Continuity of Operations] Plan

[ES Division Office \(ES-Div\) Website](#)

[Information System Security Officer \(ISSO\)](#)

[LANL Institutional Supplier List \(IESL\)](#)

[LANL Nuclear Facility List](#)

[LANL Safety Basis Document List](#)

[LA-14167-MS](#), Los Alamos National Laboratory, Concepts of Model Verification and Validation, Thacker et al., 2004

[P204-1](#), Controlled Unclassified Information

[P218](#), Cyber Security Access Controls

[P322-4](#), Laboratory Performance Feedback and Improvement Process

[P330-2](#), Control and Calibration of Measuring and Test Equipment (M&TE)

[P330-3](#), Quality Audits

[P330-5](#), Special Processes

[P330-6](#), Nonconformance Reporting

[P330-8](#), Inspection and Test

[P330-9](#), Suspect/Counterfeit Items (S/CI)

[P341](#), Facility Engineering Processes Manual

[P342](#), Engineering Standards

[P343](#), Facility Engineering Training and Qualification Manual

[P805](#), Export Control

[P840-1](#), Quality Assurance for Procurements

[P1020-2](#), Laboratory Document Control

[P1040](#), Software Quality Management

[P1011](#), Computer Hardware, Software, and Services: Exceptions to Acquisition, Maintenance, and Support

[PD110](#), Safety Basis

[PD115](#), LANL Readiness Program

[PD210](#), Cyber Security Program

[PD328](#), LANL Assessment Program

[PD340](#), Conduct of Engineering for Facility Work

[PD370](#), Conduct of Engineering for Research and Development (R&D)

[QPA-DO-FSD-001](#), LANL Safety Software Inventory Procedure

[SBP-15-351](#), Design Basis or Safety Basis Change Review

[SBP111-1](#), Facility Hazard Categorization and Documentation

[SBP112-3](#), Unreviewed Safety Question (USQ) Process

[SBP113-3](#), Unreviewed Safety Issue (USI) Process

[SD210](#), Information Risk Management Framework

[SD330](#), Los Alamos National Laboratory Quality Assurance Program

[STD-342-100](#), Engineering Standards Manual (available externally)

[Merriam-Webster Dictionary](#)

[TeamForge \(LANL-internal\)](#)

[Trac](#)