

This overview white paper is being released to support ongoing public discussions concerning the development of preliminary proposed rule language. This white paper has not been subject to complete NRC management or legal review, and its contents should not be interpreted as official agency positions. The NRC staff continues to work on the preliminary proposed rule language described in this document and continues to welcome public participation in these the rulemaking activities.

Part 53 Framework B Development Process and Provisions

Overview

The Nuclear Regulatory Commission (NRC) staff is developing optional regulatory frameworks to support eventual licensing of commercial nuclear plants through the proposed addition of a new part (Part 53) in Title 10 of the *Code of Federal Regulations* (10 CFR).¹ The existing regulatory frameworks in 10 CFR Part 50 (Part 50) and 10 CFR Part 52 (Part 52) are currently being used for licensing new reactor technologies, but they were developed largely to accommodate the design and licensing of large, light-water reactors (LWRs). Part 53 would provide technology-inclusive regulations using methods of evaluation that are flexible and practicable for application to a variety of advanced reactor technologies, such as high-temperature gas and molten salt reactors. This would, in turn, help to reduce the need for non-LWR applicants to apply exemptions from certain existing LWR-specific requirements.

Preliminary proposed Part 53 language includes two distinct licensing framework options:

- Framework A: Requirements would support an iterative approach to design and licensing where a Probabilistic Risk Assessment (PRA) is used in a leading manner. Functional design criteria informed by a PRA are established to ensure that high-level safety and design requirements are satisfied. Framework A leverages many of the principles developed as part of the licensing modernization project as outlined in Nuclear Energy Institute Report 18-04,² and NRC Regulatory Guide (RG) 1.233.³
- Framework B: Requirements would support a traditional approach to design and licensing where deterministic safety analyses are complemented by risk insights; risk insights may also be used to confirm the results of traditional safety analyses. Principal design criteria are established in the initial stages of design and licensing and subsequent design activities are performed to ensure that these criteria are met. Framework B also provides for the optional use of an Alternate Evaluation for Risk Insights (AERI) approach if certain criteria are satisfied to demonstrate that the bounding accident of such a facility would be of very low consequence.

¹ This rulemaking was initiated, in part, in response to Congressional direction in the Nuclear Energy Innovation and Modernization Act, Pub. L. No. 115-439, § 103(a)(4), 132 Stat. 5565, 5572 (Jan. 14, 2019) (codified at 42 U.S.C. § 2133 note).

² Nuclear Energy Institute Technical Report 18-04, Revision 1. Risk-Informed Performance-Based Technology Inclusive Guidance for Non-Light Water Reactor Licensing Basis Development. August 2019 (ML19241A336).

³ Regulatory Guide (RG) 1.233, Revision 0. Guidance for a Technology-Inclusive, Risk-Informed, and Performance-Based Methodology to Inform the Licensing Basis and Content of Applications for Licenses, Certifications, and Approvals for Non-Light Water Reactors. June 2020 (ML20091L698).

Framework A preliminary proposed rule language development is largely complete. The second consolidated iteration of preliminary proposed rule language for Framework A was issued in May 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22125A000).

The NRC staff is preparing a consolidated draft proposed rule package with both frameworks to be provided to the Commission in February 2023. In the interim, the NRC staff continues to provide opportunities for stakeholders to provide feedback and comments on preliminary proposed rule language⁴ and supports additional stakeholder interactions through public meetings.

Background

Framework B was developed in response to stakeholder feedback regarding the need for additional flexibility in the use of PRA in Part 53. Framework B development was also motivated by stakeholder feedback suggesting that some reactor vendors may initially pursue international markets where licensing frameworks are informed by international safety standards and guidelines that more closely align with traditional paradigms in Part 50 and Part 52. Therefore, an internationally licensed design could subsequently be licensed domestically under a traditional framework, such as Framework B, without the need for major changes to the design approach.

Efforts to develop a traditional licensing framework in Part 53 began in mid- to late-2021 with the “Part 5X” effort which proposed technology-inclusive alternatives to some of the technical requirements in Parts 50 and 52. The initial iteration of the Part 5X rule text was included within the Part 53 consolidated draft preliminary proposed rule text package issued in February 2022 (ADAMS Accession No. ML22024A066). The Part 5X rule text, including feedback received on the Part 5X rule text during stakeholder interactions in 2021, was leveraged to develop certain Framework B technical content of application requirements. For example, the accident analysis and initiating event requirements in paragraph § 53.4730(a)(5) of the draft preliminary proposed rule text was informed by the Part 5X effort.

Development Methodology

The NRC staff employed the following approach for developing Framework B requirements:

- Adopt Framework A requirements when the Framework A requirements are independent of the analysis methodology (e.g., decommissioning).
 - The NRC staff used direct cross-references to Framework A, where possible.
 - Where direct cross-references could not be used, Framework A provisions were copied to Framework B with updated internal cross-references, terminology, etc.
- Assess if existing requirements in Parts 50 and 52 are technology inclusive. If so, adopt them directly by copying the existing requirements into Framework B. In some instances, provisions from Parts 50 and 52 were not copied into Framework B, but were used by

⁴ For information on how to submit comments go to <https://www.regulations.gov> and search for Docket ID NRC-2019-0062

drafting conforming changes in the existing requirements and including a reference to these requirements in Framework B.

- Develop unique, technology-inclusive requirements corresponding, where appropriate, to existing requirements in Parts 50 and 52. Consider state-of-practice technical and policy initiatives and, as appropriate and consistent with Commission policy, approaches used in international standards.

A table summarizing the results of this development process, including the source of Framework B requirements and reason for deviations from the source, as applicable, is provided in Enclosure 1. Enclosure 1 reveals that a majority of Framework B preliminary proposed rule language is derived from Framework A or Parts 50 and 52. The NRC staff notes that there are instances where Frameworks A and B are intended to be identical or similar, but may have diverged slightly due to the timing between when the most recent iteration of each framework was released. These deviations will be reconciled when the frameworks are merged.

Structure

Like Framework A, Framework B was developed to establish a standalone set of requirements covering the entire lifecycle of a commercial nuclear plant. Therefore, Framework A was used as a starting point for establishing the structure of Framework B. As shown in Table 1, Framework A and B structures are largely parallel.

Table 1: Part 53 Organization

Subpart Title	Framework A Subpart	Framework B Subpart
General Provisions	Subpart A (Common)	
Technology-Inclusive Safety Requirements	Subpart B	Note (1)
Design and Analysis Requirements	Subpart C	
Siting Requirements	Subpart D	Note (2)
Definitions	Note (3)	Subpart N
Construction and Manufacturing Requirements	Subpart E	Subpart O
Requirements for Operation	Subpart F	Subpart P
Decommissioning Requirements	Subpart G	Subpart Q
Licenses, Certifications, and Approvals	Subpart H	Subpart R
Maintaining and Revising Licensing Basis Information	Subpart I	Subpart S
Reporting and Other Administrative Requirements	Subpart J	Subpart T
Quality Assurance Criteria	Subpart K	Subpart U

Notes:

- (1) Framework B does not include separate subparts for safety and design requirements. These are largely captured by the requirements in Subpart R in a manner similar to how technical requirements are captured for the various application types in Parts 50 and 52 as part of the technical content of application requirements for a given application type.
- (2) Framework B does not include a separate subpart for siting requirements. The siting requirements in 10 CFR Part 100 are used instead, consistent with the treatment of siting in Parts 50 and 52.
- (3) The most recent iteration of Framework A issued in May 2022 does not include a separate subpart for framework-specific definitions. It is expected that definitions specific to Framework A will be included within an existing Framework A subpart as the preliminary proposed rule language is further refined.

Subpart A: “General Provisions”

Provides a scope and purpose statement, definitions of terms common to Frameworks A and B, and other provisions common to both frameworks (e.g., written communications, employee protection, specific exemptions).

Subpart N: “Definitions”

Provides definitions that are unique to Framework B.

Subpart O: “Construction and Manufacturing Requirements”

Provides requirements regarding construction and manufacturing activities; requirements are consistent with Framework A Subpart E except for internal references.

Subpart P: “Requirements for Operation”

Provides requirements regarding plant operations, including plant personnel, maintenance, and programs. The structure of Subpart P parallels Framework A Subpart F in with some exceptions. These exceptions include certain programmatic requirements derived from the traditional licensing frameworks in Parts 50 and 52 (e.g., assessing maintenance effectiveness, environmental qualification of electrical equipment).

Subpart Q: “Decommissioning Requirements”

Provides decommissioning requirements that are consistent with Framework A Subpart G, except for internal references.

Subpart R: “Licenses, Certifications, and Approvals”

Provides design and licensing requirements for the various application types (early site permit, standard design approval, design certification, manufacturing license, construction permit, operating license, and combined license). Subpart R is analogous to Framework A Subpart H, but includes many of the technical requirements foundational and unique to Framework B (e.g., accident analyses, risk evaluations). For additional information see the “Technical Requirements” section below.

Subpart S: “Maintaining and Revising Licensing Basis Information”

Provides requirements for maintaining licensing basis information and is structured identically to Subpart I in Framework A, with some exceptions. Certain requirements have been derived from Parts 50 and 52 (e.g., changes to a facility as described in the final safety analysis report without prior NRC approval) or adapted to account for Framework B-specific features (e.g., maintenance of a risk evaluation to include AERI).

Subpart T: “Reporting and Other Administrative Requirements”

Provides reporting and administrative requirements that are analogous to Subpart J in Framework A, with some exceptions. Certain provisions were adapted from Part 50 and 52 to account for the framework-specific approaches to structures, systems, and components (SSCs) classification (e.g., immediate notification requirements from § 50.72 and licensee event reports from § 50.73).

Subpart U: “Quality Assurance Criteria”

Provides quality assurance requirements for the design, manufacture, construction, and operation of certain SSCs. Subpart U is structured similar to Framework A Subpart K, and as Subpart K, the criteria have been sourced from Part 50 Appendix B.

Technical Requirements

In contrast to the structure of technical content of application requirements in Part 50 and 52, Subpart R features a consolidated listing of technical requirements in § 53.4730 that are later referenced, as appropriate, in application-specific sections. The requirements in § 53.4730 are largely derived from the technical content of application requirements for a combined license (COL) application in § 52.79 because these requirements generally encompass the requirements for other application types. The following example illustrates how the Framework B approach compares to the organization of technical content of application requirements in Parts 50 and 52.

Design Certification (DC) and COL applicants under Part 52 are required to provide an analysis and description of the equipment and systems for combustible gas control by § 52.47(a)(12) and § 52.79(a)(8), respectively. The requirements in each of these two paragraphs in Part 52 are identical. Framework B includes a singular, identical, combustible gas control requirement in § 53.4730(a)(7) that is referenced in the technical content of application requirements for a DC and COL in § 53.4839 and § 53.5016, respectively.

A matrix summarizing § 53.4730 technical requirements referenced by each application type is provided in Enclosure 2.

Alternate Evaluation for Risk Insights (AERI)

The NRC staff recognized that the broad spectrum for which applicants may eventually pursue licensing under Framework B could include facilities that would have maximum accidents of very low consequence (e.g., low power microreactors). Considering this potential, the NRC staff has proposed an AERI approach for developing risk insights that would support licensing of these facilities. The AERI approach permits the use of alternate methods for developing risk insights (e.g., qualitative approaches) in lieu of a PRA if an applicant can satisfy the criteria in subparagraph § 53.4730(a)(34)(ii). Applicants and licensees using the AERI approach would still be required to maintain alternate risk evaluations in accordance with the requirements of § 53.6052, similar to the requirements for maintaining a PRA that are currently applied to licensees under § 50.71(h).

Enclosure 1 - Summary of Framework B Requirements and Source

Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
Subpart N – Scope and Definitions			
53.3010	Definition – Anticipated operational occurrence	10 CFR Part 50 Appendix A, with modifications	Modifications made to acknowledge the use of the term in Framework B
53.3010	Definition – Design bases	10 CFR 50.2, with modifications	Modifications replace “functional goals” with “specific functions”
53.3010	Definition – Reactor coolant pressure boundary	10 CFR 50.2, with modifications	Modifications made to clarify that definition only applies to water-cooled reactors
53.3010	Definition – Safety-related SSCs	10 CFR 50.2, with modifications	Definition from 50.2 for LWRs does not vary, new definition proposed for term as applied to non-LWRs
Subpart O – Construction and Manufacturing Requirements			
53.4100	Construction and manufacturing – scope and purpose.	Part 53 Framework A (copies 53.600)	Not applicable
53.4105	Reporting of defects and noncompliance.	Part 53 Framework A (copies 53.605, with modifications; derived from 50.55(e))	Modifications made to cross-reference equivalent Framework B provisions
53.4110	Construction.	Part 53 Framework A (copies 53.610, with modifications; derived from 50.10)	Modifications made to cross-reference equivalent Framework B provisions
53.4110(a)	Management and control	Part 53 Framework A (copies 53.4110(a), with modifications)	Modifications reference the technical requirements in Subpart R in lieu of those in Subparts B and C
53.4110(b)	Construction activities	Part 53 Framework A (copies 53.4110(b), with modifications) and 10 CFR 50.34(a)(11)	Modifications made regarding provisions for construction involving multiple reactor unit requirements adapted from 50.34(a)(11)
53.4120	Manufacturing.	Part 53 Framework A (copies 53.620, with modifications)	Modifications made to reflect the scope of SSCs that must meet quality assurance requirements in Framework B
Subpart P – Requirements for Operation			
53.4210	Maintenance, repair, and inspection programs.	10 CFR 50.65, with modifications	Modifications to existing Part 50 requirements made to ensure technology-inclusiveness and maintain

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			equivalent scope of SSCs considered within the scope of 10 CFR 50.65
53.4213	Technical specifications.	10 CFR 50.36, with modifications	Modifications to existing Part 50 requirements made to ensure technology-inclusiveness and maintain equivalent scope of SSCs in TSs
53.4215	Vibratory ground motion required shutdown.	Part 53 Framework A (copies 53.720) and 10 CFR 50.54(ff)	Not applicable
53.4220	General staffing, training, personnel qualifications, and human factors requirements.	Part 53 Framework A (copies 53.725), with modifications	Adapted to Framework B. In general, a primary difference that spans the requirements of Framework B §§ 53.4220 through 53.4282 is that the certified operator provisions of Framework A are reserved. Beyond that, another key source of significant differences in comparison with Framework A stems from Framework B not including the provisions of Part 53 subparts B & C.
53.4222	Communications	Part 53 Framework A (copies 53.726), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4224	Information Collection Requirements	Part 53 Framework A (copies 53.727), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4226	Defining, fulfilling, and maintaining the role of personnel in ensuring safe operations.	Part 53 Framework A (copies 53.730), with modifications	Omits certified operator provisions
53.4228	General exemptions.	Part 53 Framework A (copies 53.735), with modifications	Omits certified operator provisions and ensures appropriate cross referencing
53.4230	Conditions for operations staffing for operating or combined licenses under this part.	Part 53 Framework A (copies 53.740), with modifications	Omits certified operator staffing screening criteria and related certified operator provisions
53.4232	Medical requirements.	Part 53 Framework A (copies 53.745), with modifications	Omits certified operator provisions.
53.4234	Violations.	Part 53 Framework A (direct reference to 53.750)	Not applicable

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53.4236	Criminal penalties.	Part 53 Framework A (copies 53.755), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4240	Operator licensing.	Part 53 Framework A (copies 53.760), with modifications	Adapted to Framework B
53.4242	License requirements.	Part 53 Framework A (direct reference to 53.765)	Not applicable
53.4244	Completeness and accuracy of information.	Part 53 Framework A (direct reference to 53.770)	Not applicable
53.4246	Incapacitation because of disability or illness.	Part 53 Framework A (direct reference to 53.775)	Not applicable
53.4248	Applications for licensed operators.	Part 53 Framework A (direct reference to 53.780)	Not applicable
53.4250	Training program.	Part 53 Framework A (reference to 53.785), with modifications	References to change control provisions are adapted to the relevant section of Framework B
53.4252	Conditions of licensed operator and senior licensed operator licenses.	Part 53 Framework A (direct reference to 53.790)	Not applicable
53.4254	Expiration and Renewal	Part 53 Framework A (direct reference to 53.792)	Not applicable
53.4256	Issuance, modification, and revocation of licenses.	Part 53 Framework A (direct reference to 53.795)	Not applicable
53.4260 – 53.4279	Reserved.	Not applicable	Not applicable
53.4280	Training and qualification of commercial nuclear plant personnel.	Part 53 Framework A (copies 53.835), with modifications	Adapted to Framework B
53.4282	Training and qualification requirements.	Part 53 Framework A (direct reference to 53.840)	Not applicable
53.4300	Programs.	Part 53 Framework A (copies 53.840), with modifications	Modifications made to align prefatory text with fundamental safety objectives in Framework B
53.4310	Radiation protection.	See below	
53.4310(a)	Radiation protection.	Part 53 Framework A (copies 53.850(a)), with modifications	Modifications made to cross-reference equivalent Framework B provisions and ensure compliance with entirety of 10 CFR Part 20.
53.4310(b)	Radiation protection.	Part 53 Framework A (copies 53.850(b)), with modifications, and 10 CFR 50.36a	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4310(c)	Radiation protection.	New requirement developed for consistency with existing Standard Technical Specifications and 10 CFR 50.36a requirements	Establishes specific requirements for process control program through compliance with radioactive waste control provisions
53.4320	Emergency preparedness.	Part 53 Framework A (direct reference to 53.855)	Not applicable.
53.4330	Security programs.	Part 53 Framework A (copies 53.860), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4340	Quality assurance.	Part 53 Framework A (copies 53.865), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4350	Fire protection.	10 CFR 50.48, 10 CFR Part 50 Appendix R with modifications, NFPA-805	Technology-inclusive fire protection requirements that require applicant to define "safe and stable state" for their design and determine the safe shutdown functions to achieve and maintain safe and stable state; performance-based alternative provided in 53.4350(c)
53.4360	Inservice inspection/inservice testing.	See below	
53.4360(a)	Inservice inspection/inservice testing for LWRs	Reference to 10 CFR 50.55a (ISI and IST provisions only)	Not applicable
53.4360(b)	Inservice inspection/inservice testing for NLWRs	Part 53 Framework A (direct reference to 53.880)	Not applicable
53.4380	Environmental qualification of electric equipment important to safety for nuclear power plants.	10 CFR 50.49, with modifications	Modifications made to Part 50 requirements to ensure technology-inclusiveness
53.4390	Procedures and guidelines.	Part 53 Framework A (copies portions of 53.910), with modifications	Modifications made to address variances in design basis events and SSC classifications between frameworks
53.4400	Integrity assessment program	Part 53 Framework A (53.870), with modifications	Modifications made to accommodate SSC classification scheme used in Framework B; scope of SSCs derived from 10 CFR 53.4210

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4410	Primary containment leakage rate testing program.	10 CFR 50.54(o), with modifications	Modifications made to cross-reference equivalent Framework B provisions
Subpart Q - Decommissioning			
53.4600	Scope and Purpose.	Part 53 Framework A (copies 53.1000), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4610	Financial assurance for decommissioning.	Part 53 Framework A (copies 53.1010), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4620	Cost estimates for required decommissioning funds.	Part 53 Framework A (copies 53.1020), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4630	Annual adjustments.	Part 53 Framework A (copies 53.1030), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4640	Financial instruments for decommissioning funds.	Part 53 Framework A (copies 53.1040), with modifications, and 10 CFR 50.75(e)	Modifications made to cross-reference equivalent Framework B provisions
53.4645	Financial management of decommissioning funds.	Part 53 Framework A (copies 53.1045), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4650	NRC oversight.	Part 53 Framework A (copies 53.1050) and 10 CFR 50.75(e)(2)	Not applicable
53.4660	Reporting and recordkeeping requirements.	Part 53 Framework A (copies 53.1060), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4670	Termination of license.	Part 53 Framework A (copies 53.1070), with modifications, and 10 CFR 50.82	Modifications made to cross-reference equivalent Framework B provisions
53.4680	Release of part of a commercial nuclear plant or site for unrestricted use.	Part 53 Framework A (copies 53.1080), with modifications, and 10 CFR 50.83	Modifications made to cross-reference equivalent Framework B provisions
Subpart R - Licenses, Certifications, and Approvals			
53.4700	Filing of application for licenses, certifications, or approvals; oath or affirmation.	Part 53 Framework A (copies 53.1100), with modifications, and 10 CFR 50.30	Modifications made to cross-reference equivalent Framework B provisions
53.4701	Requirement for license.	Part 53 Framework A (copies 53.1101), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4703	Combining applications.	Part 53 Framework A (copies 53.1103), with modifications, and 10 CFR 50.31 and 52.8	Modifications made to cross-reference equivalent Framework B provisions
53.4706	Elimination of repetition.	Part 53 Framework A (copies 53.1106), with modifications, and 10 CFR 50.32	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4709	Contents of application; general information.	Part 53 Framework A (copies 53.1109), with modifications, and 10 CFR 50.33	Modifications made to cross-reference equivalent Framework B provisions
53.4712	Environmental conditions.	Part 53 Framework A (copies 53.1112), with modifications, and 10 CFR 50.36(b)	Modifications made to cross-reference equivalent Framework B provisions
53.4715	Agreement limiting access to Classified Information.	Part 53 Framework A (copies 53.1115), with modifications, and 10 CFR 50.37	Modifications made to cross-reference equivalent Framework B provisions
53.4718	Ineligibility of certain applicants.	Part 53 Framework A (copies 53.1118), with modifications, and 10 CFR 50.38	Modifications made to cross-reference equivalent Framework B provisions
53.4720	Exceptions and exemptions from licensing requirements	Part 53 Framework A (copies 53.1120), with modifications, and 10 CFR 50.11	Modifications made to cross-reference equivalent Framework B provisions
53.4721	Public inspection of applications.	Part 53 Framework A (copies 53.1121), with modifications, and 10 CFR 50.39	Modifications made to cross-reference equivalent Framework B provisions
53.4724	Relationship between sections.	Part 53 Framework A (copies 53.1124), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4725	Standards for review.	See below	
53.4725(a)	Common standards.	10 CFR 50.40, with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4725(b)	Additional standards for class 104 licenses.	10 CFR 50.41, with modifications	Modifications made to limit scope of the review standard to potential Framework B applicants
53.4725(c)	Additional standards for class 103 licenses.	10 CFR 50.42, with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4725(d)	Additional standards and provisions affecting class 103 licenses and certifications for commercial power.	10 CFR 50.43, with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4730	General technical requirements.	See below	
53.4730(a)(1)	Site safety analysis.	10 CFR 52.79(a)(1), with modifications	Modifications made to support technology-inclusive rule text
53.4730(a)(2)	Facility description.	10 CFR 52.79(a)(2), with modifications	Modifications made to support technology-inclusive rule text
53.4730(a)(3)	Kinds and quantities of radioactive materials.	10 CFR 52.79(a)(3), with modifications, 10 CFR 50.34a, and 10 CFR 20.1101(b)	Modifications made to reflect requirements in 10 CFR Subpart B for ALARA

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4730(a)(4)	Design bases and principal design criteria	10 CFR 52.79(a)(4), with modifications	Modifications made to support technology-inclusive rule text
53.4730(a)(5)	Initiating event and accident analysis	See below	
53.4730(a)(5)(i)	Initiating event and accident analysis – Requirement for analysis and evaluation	10 CFR 52.79(a)(5), with modifications	Modifications made to support technology-inclusive rule text and accommodate new event classifications below
53.4730(a)(5)(ii)	Initiating event and accident analysis – DBA	New technology-inclusive requirements for DBA analyses and SSC classification; 10 CFR 50.46	Modifications made to support technology-inclusive rule text, define acceptance criteria consistent with current rules and create new 50.46-like requirement; includes addition of bounding option
53.4730(a)(5)(iii)	Initiating event and accident analysis – AOO	New requirement for AOOs that is consistent with current requirements to remain below Part 20 acceptance criteria and prevent event escalation	Requirement is “new” but is based on other existing requirements (and includes a pointer to Part 20) and guidance for AOOs
53.4730(a)(5)(iv)	Initiating event and accident analysis – BDBEs	New requirements for assessments and analyses for credible BDBEs in (A), requirement to provide design features or programmatic controls to mitigate these events in (B) (attempt to create technology-inclusive class of events such as SBO and ATWS)	Provides technology-inclusive requirements for important BDBEs and analysis requirements for other BDBEs, similar to international defense in depth requirements
53.4730(a)(5)(v)	Initiating event and accident analysis – severe accidents	10 CFR 52.79(a)(38), with modifications	Modifications made to support technology-inclusive rule text
53.4730(a)(5)(vi)	Initiating event and accident analysis - chemical hazards	Part 53 Framework A (53.440(k)), with modifications	New requirement that was modified from Framework A for consistency with Framework B organization and analysis approach
53.4730(a)(6)	Fire protection.	10 CFR 52.79(a)(6) and (a)(40), with modifications	Modifications reference back to analogous program and design requirements in subpart P

Enclosure 1 - Summary of Framework B Requirements and Source

Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4730(a)(7)	Combustible gas control.	10 CFR 52.79(a)(8) and 10 CFR 50.44, by extension	Not applicable
53.4730(a)(8)	Environmental qualification of electric equipment important to safety.	10 CFR 52.79(a)(10), with modifications, and 10 CFR 50.49, by extension	Modifications reference back to analogous program requirements in subpart P. Split to accommodate the different amounts of information required for the various applications.
53.4730(a)(9)	Role of personnel.	10 CFR 52.79(a)(14) and 10 CFR 52.79(a)(34) with restructuring	New requirement that maps back to analogous operational requirements in subpart P
53.4730(a)(10)	Maintenance rule.	10 CFR 52.79(a)(15), with modifications, and 10 CFR 50.65, by extension	Modifications made to reference analogous program requirements in subpart P
53.4730(a)(11)	Effluent control	10 CFR 52.79(a)(16), 10 CFR 50.34a, and 10 CFR 20.1101(d), with modifications	Modifications made to reference analogous program requirements in subpart P and address existing light-water-reactor requirements in 10 CFR Part 50, Appendix I for effluents
53.4730(a)(12)	Post-accident radiation monitoring and protection.	See below	
53.4730(a)(12)(i)	Post-accident radiation monitoring and protection (TMI action item)	10 CFR 50.34(f)(2)(vii)	Not applicable
53.4730(a)(12)(ii)	Post-accident radiation monitoring and protection (TMI action item)	10 CFR 50.34(f)(2)(viii), with modifications	Modifications made to acknowledge that the "list" referred to in the source reference does not exist in 10 CFR Appendix B nor has one been proposed for inclusion in Subpart U.
53.4730(a)(12)(iii)	Post-accident radiation monitoring and protection (TMI action item)	10 CFR 50.34(f)(2)(xv)	Not applicable
53.4730(a)(13)	Reserved.	Not applicable	
53.4730(a)(14)	Earthquake engineering criteria.	10 CFR 52.79(a)(19), with modifications, and 10 CFR Part 50 Appendix S, by extension	Modifications have been made to ensure technology-inclusiveness when referencing 10 CFR Part 50 Appendix S requirements

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4730(a)(15)	Emergency plans	10 CFR 52.79(a)(21), with modifications	Modifications made to cross-reference requirements in subpart P, which ultimately map back to Framework A (53.855)
53.4730(a)(16)	State and local government cooperation in emergency planning.	10 CFR 52.79(a)(22), with modifications	Modifications made to reflect state-of-practice policy initiatives and align with Commission's "Tribal Policy Statement" (82 FR 2402) and the 2019 issuance of NUREG-0654/FEMA-REP-1, Revision 2, which encourages the involvement of Tribal governments in NRC activities (also see SECY-22-0001)
53.4730(a)(17)	Safety feature testing, analyses, operating experience, and prototypes.	10 CFR 52.79(a)(24) and 10 CFR 50.43(e), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4730(a)(18)	Quality assurance program.	See below	
53.4730(a)(18)(i)	Quality assurance program (TMI action item)	10 CFR 50.34(f)(3)(iii), with modifications	Modifications to limit applicability, consistent with existing requirements in 10 CFR 50.34(f) which limit applicability based on technical relevance
53.4730(a)(18)(ii)	Quality assurance program (TMI action item)	10 CFR 50.34(f)(3)(ii), with modifications	Modifications to cross-reference subpart U instead of 10 CFR Part 50 Appendix B
53.4730(a)(18)(iii)	Quality assurance program (COL application req.)	10 CFR 52.79(a)(25), with modifications	Modifications made to reference analogous program requirements in subpart U
53.4730(a)(19)	Organizational structure.	10 CFR 52.79(a)(26)	Not applicable
53.4730(a)(20)	Managerial and administrative controls.	See below	
53.4730(a)(20)(i)	Managerial and administrative controls.	10 CFR 52.79(a)(27), with modifications	

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4730(a)(20)(ii)	Managerial and administrative controls (TMI action item)	10 CFR 50.34(f)(3)(vii), with modifications	Modifications made to limit applicability consistent with existing provisions in 10 CFR 50.34(f)
53.4730(a)(21)	Preoperational testing and initial startup.	10 CFR 52.79(a)(28)	Not applicable
53.4730(a)(22)	Normal operations and maintenance.	10 CFR 52.79(a)(29)	Not applicable
53.4730(a)(23)	Technical specifications.	10 CFR 52.79(a)(30), with modifications and 10 CFR 50.36	Modifications made to reference technical specification requirements in subpart P and differentiate requirements for TSs between application types
53.4730(a)(24)	Fitness-for-duty programs.	10 CFR 52.79(a)(44) and 10 CFR Part 26, by extension	Not applicable
53.4730(a)(25)	Multi-unit sites.	10 CFR 52.79(a)(31)	Not applicable
53.4730(a)(26)	Technical qualifications.	10 CFR 52.79(a)(32)	Not applicable
53.4730(a)(27)	Training program.	10 CFR 52.79(a)(33), with modifications	Modifications made to reference analogous program requirements in subpart P
53.4730(a)(28)	Physical security program.	10 CFR 52.79(a)(35), with modifications	Modifications made to reference analogous program requirements in subpart P
53.4730(a)(29)	Safeguards, security, and related training and qualifications.	10 CFR 52.79(a)(36), with modifications	Modifications made to include an additional reference to 10 CFR 73.22
53.4730(a)(30)	Operating experience.	10 CFR 52.79(a)(37), with modifications	Modifications limit applicability of this requirement to accommodate designs with limited operating experience
53.4730(a)(31)	Radiation protection program	10 CFR 52.79(a)(39), with modifications	Modifications made to reference analogous program requirements in subpart P
53.4730(a)(32)	Criticality accident requirements.	10 CFR 52.79(a)(43), with modifications	Modifications made to reference criticality accident and monitoring requirements in part 53 Framework A 53.440(m)

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4730(a)(33)	Minimization of contamination.	10 CFR 52.79(a)(45) and 10 CFR 20.1406, by extension	Not applicable
53.4730(a)(34)	Risk evaluations.	See below	
53.4730(a)(34)(i)	Risk evaluations – PRA	10 CFR 52.79(a)(46), with modifications	Modifications made to accommodate same requirement in Framework B; no technical changes
53.4730(a)(34)(ii)	Risk evaluations - AERI	New alternative to meeting 53.4730(a)(34)(i)	Not applicable
53.4730(a)(35)	Aircraft impact assessment.	10 CFR 50.150(a) and (b), with modifications.	Modifications made to support technology-inclusive rule text
53.4730(a)(36)	Functional containment.	See below	
53.4730(a)(36)(i)	Functional containment – NLWR	New alternative developed for NLWRs consistent with policy in SECY-18-0096	Not applicable
53.4730(a)(36)(ii)	Functional containment - LWR	Requirements developed by combining 10 CFR Part 50 Appendix J requirements with relevant TMI action items (10 CFR 50.34(f)(2)(xiv), (f)(2)(xv), and (f)(3)(iv))	Modifications to TMI action items made to limit applicability, consistent with current requirements in 10 CFR 50.34(f), which are limited based on technical relevance
53.4730(a)(37)	Water-cooled reactor requirements.	See below	
53.4730(a)(37)(i)	Emergency core cooling systems.	10 CFR 52.79(a)(5), with modifications, and 10 CFR 50.46 and 10 CFR 50.46a, by extension	Modifications made to abbreviate language from existing requirement
53.4730(a)(37)(ii)	Codes and standards.	10 CFR 52.79(a)(11) and 10 CFR 50.55a, by extension	Not applicable
53.4730(a)(37)(iii)	Pressurized thermal shock and fracture toughness requirements.	10 CFR 52.79(a)(7) and 10 CFR 50.60 and 10 CFR 50.61, by extension	Not applicable
53.4730(a)(37)(iv)	Anticipated transients without scram.	10 CFR 52.79(a)(42) and 10 CFR 50.62, by extension	Not applicable
53.4730(a)(37)(v)	Station blackout.	10 CFR 52.79(a)(9) and 10 CFR 50.63, by extension	Not applicable
53.4730(a)(37)(vi)	Reactor vessel material surveillance.	10 CFR 52.79(a)(13) and 10 CFR Part 50 Appendix H, by extension	Not applicable
53.4730(a)(37)(vii)	Containment leakage testing.	10 CFR 52.79(a)(12) and 10 CFR Part 50 Appendix J, by extension	Not applicable
53.4730(a)(37)(viii)	Standard review plan evaluation.	10 CFR 52.79(a)(41)	Not applicable

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4730(a)(37)(ix)	Resolution of generic issues.	10 CFR 52.79(a)(20), with modifications	Modifications to adopt corrections proposed in ongoing policy initiatives that recognize new classification scheme in NUREG-0933
53.4730(a)(37)(x)	LWR-specific Three Mile Island requirements.	See below	
53.4730(a)(37)(x)(A)	LWR-specific Three Mile Island requirements.	10 CFR 50.34(f)(2)(xiii)	Not applicable
53.4730(a)(37)(x)(B)	LWR-specific Three Mile Island requirements.	10 CFR 50.34(f)(2)(xx)	Not applicable
53.4730(a)(37)(x)(C)	LWR-specific Three Mile Island requirements.	10 CFR 50.34(f)(2)(x)	Not applicable
53.4731	Risk-informed classification of structures, systems, and components	10 CFR 50.69, with modifications	Modifications made to ensure technology-inclusiveness and reference equivalent provisions from Framework B
53.4740	Limited work authorizations.	Part 53 Framework A (copies 53.1130), with modifications, and 10 CFR 50.10	Modifications made to cross-reference equivalent Framework B provisions
53.4750	Early site permits.	Part 53 Framework A (copies 53.1140), with modifications, and 10 CFR 52.12	Modifications made to cross-reference equivalent Framework B provisions
53.4753	Filing of applications.	Part 53 Framework A (copies 53.1143), with modifications, and 10 CFR 52.15	Modifications made to cross-reference equivalent Framework B provisions
53.4754	Contents of applications for early site permits; general information.	Part 53 Framework A (copies 53.1144), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4756	Contents of applications for early site permits; technical information.	10 CFR 52.17, with modifications	Modifications made to adopt equivalent technical requirements in section 53.4730 and, where section 53.4730 was not leveraged, update references to equivalent provisions in Framework B
53.4759	Review of applications.	Part 53 Framework A (copies 53.1149), with modifications, and 10 CFR 52.18 and 52.21	Modifications made to cross-reference equivalent Framework B provisions
53.4765	Referral to the Advisory Committee on Reactor Safeguards (ACRS).	Part 53 Framework A (copies 53.1155), with modifications, and 10 CFR 52.23	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4768	Issuance of early site permit.	Part 53 Framework A (copies 53.1158), with modifications, and 10 CFR 52.24	Modifications made to cross-reference equivalent Framework B provisions
53.4771	Extent of activities permitted.	Part 53 Framework A (copies 53.1161), with modifications, and 10 CFR 52.25	Modifications made to cross-reference equivalent Framework B provisions
53.4774	Duration of permit.	Part 53 Framework A (copies 53.1164), with modifications, and 10 CFR 52.26	Modifications made to cross-reference equivalent Framework B provisions
53.4777	Limited work authorization after issuance of early site permit.	Part 53 Framework A (copies 53.1167), with modifications, and 10 CFR 52.27	Modifications made to cross-reference equivalent Framework B provisions
53.4780	Transfer of early site permit.	Part 53 Framework A (copies 53.1170), with modifications, and 10 CFR 52.28	Modifications made to cross-reference equivalent Framework B provisions
53.4783	Application for renewal.	Part 53 Framework A (copies 53.1173), with modifications, and 10 CFR 52.29	Modifications made to cross-reference equivalent Framework B provisions
53.4786	Criteria for renewal.	Part 53 Framework A (copies 53.1176), with modifications, and 10 CFR 52.31	Modifications made to cross-reference equivalent Framework B provisions
53.4789	Duration of renewal.	Part 53 Framework A (copies 53.1179), with modifications, and 10 CFR 52.33	Modifications made to cross-reference equivalent Framework B provisions
53.4792	Use of site for other purposes.	Part 53 Framework A (copies 53.1182), with modifications, and 10 CFR 52.35	Modifications made to cross-reference equivalent Framework B provisions
53.4795	Reporting of defects and noncompliance; revocation, suspension, modification of permits for cause.	Part 53 Framework A (copies 53.1185), with modifications, and 10 CFR 52.37	Modifications made to cross-reference equivalent Framework B provisions
53.4798	Finality of early site permit determinations.	Part 53 Framework A (copies 53.1188), with modifications, and 10 CFR 52.39	Modifications made to cross-reference equivalent Framework B provisions
53.4800	Standard design approvals.	Part 53 Framework A (copies 53.1200), with modifications, and 10 CFR 52.131	Modifications made to cross-reference equivalent Framework B provisions
53.4803	Filing of applications.	Part 53 Framework A (copies 53.1203), with modifications, and 10 CFR 52.135	Modifications made to cross-reference equivalent Framework B provisions
53.4806	Contents of applications for standard design approvals; general information.	Part 53 Framework A (copies 53.1206), with modifications, and 10 CFR 52.136	Modifications made to cross-reference equivalent Framework B provisions
53.4809	Contents of applications for standard design approvals; technical information.	10 CFR 52.137, with modifications	Modifications made to adopt equivalent technical requirements in section 53.4730 and, where section 53.4730

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
			was not leveraged, update references to equivalent provisions in Framework B
53.4812	Review of applications.	Part 53 Framework A (copies 53.1212), with modifications, and 10 CFR 52.139	Modifications made to cross-reference equivalent Framework B provisions
53.4815	Referral to the Advisory Committee on Reactor Safeguards (ACRS).	Part 53 Framework A (copies 53.1215), with modifications, and 10 CFR 52.141	Modifications made to cross-reference equivalent Framework B provisions
53.4818	Staff approval of design.	Part 53 Framework A (copies 53.1218), with modifications, and 10 CFR 52.143 and 52.147	Modifications made to cross-reference equivalent Framework B provisions
53.4821	Finality of standard design approvals; information requests.	Part 53 Framework A (copies 53.1221), with modifications, and 10 CFR 52.145	Modifications made to cross-reference equivalent Framework B provisions
53.4830	Standard design certifications.	Part 53 Framework A (copies 53.1230), with modifications, and 10 CFR 52.41	Modifications made to cross-reference equivalent Framework B provisions
53.4833	Filing of applications.	Part 53 Framework A (copies 53.1233), with modifications, and 10 CFR 52.45	Modifications made to cross-reference equivalent Framework B provisions
53.4836	Contents of applications for standard design certifications; general information.	Part 53 Framework A (copies 53.1236), with modifications, and 10 CFR 52.46	Modifications made to cross-reference equivalent Framework B provisions
53.4839	Contents of applications for standard design certifications; technical information.	10 CFR 52.47, with modifications	Modifications made to adopt equivalent technical requirements in section 53.4730 and, where section 53.4730 was not leveraged, update references to equivalent provisions in Framework B
53.4841	Contents of applications for standard design certifications; other application content.	Part 53 Framework A (copies 53.1241), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4842	Review of applications.	Part 53 Framework A (copies 53.1242), with modifications, and 10 CFR 52.48 and 52.51	Modifications made to cross-reference equivalent Framework B provisions
53.4845	Referral to the Advisory Committee on Reactor Safeguards (ACRS).	Part 53 Framework A (copies 53.1245), with modifications, and 10 CFR 52.53	Modifications made to cross-reference equivalent Framework B provisions
53.4848	Issuance of standard design certification.	Part 53 Framework A (copies 53.1248), with modifications, and 10 CFR 52.54	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4851	Duration of certification.	Part 53 Framework A (copies 53.1251), with modifications, and 10 CFR 52.55	Modifications made to cross-reference equivalent Framework B provisions
53.4854	Application for renewal.	Part 53 Framework A (copies 53.1254), with modifications, and 10 CFR 52.57	Modifications made to cross-reference equivalent Framework B provisions
53.4857	Criteria for renewal.	Part 53 Framework A (copies 53.1257), with modifications, and 10 CFR 52.59	Modifications made to cross-reference equivalent Framework B provisions
53.4860	Duration of renewal.	Part 53 Framework A (copies 53.1260), with modifications, and 10 CFR 52.61	Modifications made to cross-reference equivalent Framework B provisions
53.4863	Finality of standard design certifications.	Part 53 Framework A (copies 53.1263), with modifications, and 10 CFR 52.63	Modifications made to cross-reference equivalent Framework B provisions
53.4870	Manufacturing licenses.	Part 53 Framework A (copies 53.1270), with modifications, and 10 CFR 52.151	Modifications made to cross-reference equivalent Framework B provisions
53.4873	Filing of applications.	Part 53 Framework A (copies 53.1273), with modifications, and 10 CFR 52.155	Modifications made to cross-reference equivalent Framework B provisions
53.4876	Contents of applications for manufacturing licenses; general information.	Part 53 Framework A (copies 53.1276), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4879	Contents of applications for manufacturing licenses; technical information.	10 CFR 52.157, with modifications	Modifications made to adopt equivalent technical requirements in section 53.4730 and, where section 53.4730 was not leveraged, update references to equivalent provisions in Framework B
53.4882	Contents of applications for manufacturing licenses; other application content.	Part 53 Framework A (copies 53.1282), with modifications, and 10 CFR 52.158	Modifications made to cross-reference equivalent Framework B provisions
53.4885	Review of applications.	Part 53 Framework A (copies 53.1285), with modifications, and 10 CFR 52.159	Modifications made to cross-reference equivalent Framework B provisions
53.4886	Referral to ACRS.	Part 53 Framework A (copies 53.1286), with modifications, and 10 CFR 52.165	Modifications made to cross-reference equivalent Framework B provisions
53.4887	Issuance of a manufacturing license.	Part 53 Framework A (copies 53.1287), with modifications, and 10 CFR 52.167	Modifications made to cross-reference equivalent Framework B provisions
53.4888	Finality of manufacturing licenses; information requests.	Part 53 Framework A (copies 53.1288), with modifications, and 10 CFR 52.171	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4891	Duration of manufacturing licenses.	Part 53 Framework A (copies 53.1291), with modifications, and 10 CFR 52.173	Modifications made to cross-reference equivalent Framework B provisions
53.4893	Transfer of manufacturing licenses.	Part 53 Framework A (copies 53.1293), with modifications, and 10 CFR 52.175	Modifications made to cross-reference equivalent Framework B provisions
53.4895	Renewal of manufacturing licenses.	Part 53 Framework A (copies 53.1295), with modifications, and 10 CFR 52.177 and 52.179	Modifications made to cross-reference equivalent Framework B provisions
53.4900	Construction permits.	Part 53 Framework A (copies 53.1300), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4906	Contents of applications for construction permits; general information.	Part 53 Framework A (copies 53.1306), with modifications, and 10 CFR 50.33	Modifications made to cross-reference equivalent Framework B provisions
53.4909	Contents of applications for construction permits; technical information.	10 CFR 50.34(a), with modifications	Modifications made to adopt equivalent technical requirements in section 53.4730 and, where section 53.4730 was not leveraged, update references to equivalent provisions in Framework B
53.4912	Contents of applications for construction permits; other application content.	Part 53 Framework A (copies 53.1312), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4915	Review of applications.	Part 53 Framework A (copies 53.1315), with modifications, and 10 CFR 52.81, 50.58, and 52.85	Modifications made to cross-reference equivalent Framework B provisions
53.4918	Finality of referenced NRC approvals, licenses and certifications.	Part 53 Framework A (copies 53.1318), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4924	Referral to the Advisory Committee on Reactor Safeguards (ACRS).	Part 53 Framework A (copies 53.1324), with modifications, and 10 CFR 50.58 and 52.87	Modifications made to cross-reference equivalent Framework B provisions
53.4927	Authorization to conduct limited work authorization activities.	Part 53 Framework A (copies 53.1327), with modifications, and 10 CFR 50.10(g)	Modifications made to cross-reference equivalent Framework B provisions
53.4930	Exemptions, departures, and variances.	Part 53 Framework A (copies 53.1330), with modifications, and 10 CFR 50.11, 52.93, 52.39(d)	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4933	Issuance of construction permits.	Part 53 Framework A (copies 53.1333), with modifications, and 10 CFR 30.35, 50.36(b), 52.97(c), and 50.35(b)	Modifications made to cross-reference equivalent Framework B provisions
53.4936	Finality of construction permits.	Part 53 Framework A (copies 53.1336), with modifications, and 10 CFR 50.35(b) and (c)	Modifications made to cross-reference equivalent Framework B provisions
53.4939	Construction activities.	Part 53 Framework A (copies 53.1339), with modifications, and 10 CFR 53.610	Modifications made to cross-reference equivalent Framework B provisions
53.4942	Duration of construction permit.	Part 53 Framework A (copies 53.1342), with modifications, and 10 CFR 50.55(a) and (b)	Modifications made to cross-reference equivalent Framework B provisions
53.4945	Transfer of construction permits.	Part 53 Framework A (copies 53.1345), with modifications, and 10 CFR 50.80	Modifications made to cross-reference equivalent Framework B provisions
53.4948	Termination of construction permits.	Part 53 Framework A (copies 53.1348), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4960	Operating licenses.	Part 53 Framework A (copies 53.1360), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4966	Contents of applications for operating licenses; general information.	Part 53 Framework A (copies 53.1366), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4969	Contents of applications for operating licenses; technical information.	10 CFR 50.34(b) with modifications	Modifications made to adopt equivalent technical requirements in section 53.4730 and, where section 53.4730 was not leveraged, update references to equivalent provisions in Framework B
53.4972	Contents of applications for operating licenses; other application content.	Part 53 Framework A (copies 53.1372), with modifications, and 10 CFR 51.50, 53.710(a), and 53.710(b)	Modifications made to cross-reference equivalent Framework B provisions
53.4975	Review of applications.	Part 53 Framework A (copies 53.1375), with modifications, and 10 CFR 52.81, 50.34, and 52.85	Modifications made to cross-reference equivalent Framework B provisions
53.4981	Referral to the Advisory Committee on Reactor Safeguards (ACRS).	Part 53 Framework A (copies 53.1381), with modifications, and 10 CFR 50.58 and 52.87	Modifications made to cross-reference equivalent Framework B provisions
53.4984	Exemptions, departures, and variances.	Part 53 Framework A (copies 53.1384), with modifications, and 10 CFR 52.93 and 52.39(d)	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.4987	Issuance of operating licenses.	Part 53 Framework A (copies 53.1387), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.4990	Finality of operating licenses.	Part 53 Framework A (copies 53.1390), with modifications, and 10 CFR 52.98(a)	Modifications made to cross-reference equivalent Framework B provisions
53.4996	Duration of operating license.	Part 53 Framework A (copies 53.1396), with modifications, and 10 CFR 50.51	Modifications made to cross-reference equivalent Framework B provisions
53.4999	Transfer of an operating license.	Part 53 Framework A (copies 53.1399), with modifications, and 10 CFR 52.105	Modifications made to cross-reference equivalent Framework B provisions
53.5002	Application for renewal.	Part 53 Framework A (copies 53.1402), with modifications, and 10 CFR 52.107	Modifications made to cross-reference equivalent Framework B provisions
53.5005	Continuation of an operating license.	Part 53 Framework A (copies 53.1405), with modifications, and 10 CFR 50.51	Modifications made to cross-reference equivalent Framework B provisions
53.5010	Combined licenses.	Part 53 Framework A (copies 53.1410), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.5013	Contents of applications for combined licenses; general information.	Part 53 Framework A (copies 53.1413), with modifications, and 10 CFR 52.77	Modifications made to cross-reference equivalent Framework B provisions
53.5016	Contents of applications for combined licenses; technical information.	10 CFR 52.79, with modifications	Modifications made to adopt equivalent technical requirements in section 53.4730 and, where section 53.4730 was not leveraged, update references to equivalent provisions in Framework B
53.5019	Contents of applications for combined licenses; other application content.	Part 53 Framework A (copies 53.1419), with modifications, and 10 CFR 52.80	Modifications made to cross-reference equivalent Framework B provisions
53.5022	Review of applications.	Part 53 Framework A (copies 53.1422), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.5025	Finality of referenced NRC approvals.	Part 53 Framework A (copies 53.1425), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.5031	Referral to the Advisory Committee on Reactor Safeguards.	Part 53 Framework A (copies 53.1431), with modifications, and 10 CFR 52.87	Modifications made to cross-reference equivalent Framework B provisions
53.5034	Authorization to conduct limited work authorization activities.	Part 53 Framework A (copies 53.1434), with modifications, and 10 CFR 52.91	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.5037	Exemptions and variances.	Part 53 Framework A (copies 53.1437), with modifications, and 10 CFR 52.93	Modifications made to cross-reference equivalent Framework B provisions
53.5040	Issuance of combined licenses.	Part 53 Framework A (copies 53.1440), with modifications, and 10 CFR 52.97	Modifications made to cross-reference equivalent Framework B provisions
53.5043	Finality of combined licenses.	Part 53 Framework A (copies 53.1443), with modifications, and 10 CFR 52.98	Modifications made to cross-reference equivalent Framework B provisions
53.5046	Construction activities.	Part 53 Framework A (copies 53.1446), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.5049	Inspection during construction.	Part 53 Framework A (copies 53.1449), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.5052	Operation under a combined license.	Part 53 Framework A (copies 53.1452), with modifications, and 10 CFR 52.103	Modifications made to cross-reference equivalent Framework B provisions
53.5055	Duration of combined license.	Part 53 Framework A (copies 53.1455), with modifications, and 10 CFR 52.104	Modifications made to cross-reference equivalent Framework B provisions
53.5056	Transfer of a combined license.	Part 53 Framework A (copies 53.1456), with modifications, and 10 CFR 52.105	Modifications made to cross-reference equivalent Framework B provisions
53.5058	Application for renewal.	Part 53 Framework A (copies 53.1458), with modifications, and 10 CFR 52.107	Modifications made to cross-reference equivalent Framework B provisions
53.5061	Continuation of combined license.	Part 53 Framework A (copies 53.1461), with modifications, and 10 CFR 52.109	Modifications made to cross-reference equivalent Framework B provisions
53.5070	Standardization of nuclear power plant designs: licenses to construct and operate nuclear power reactors of identical design at multiple sites.	Part 53 Framework A (copies 53.1470), with modifications, and Appendix N of Parts 50 and 52	Modifications made to cross-reference equivalent Framework B provisions
Subpart S – License Maintenance			
53.6000	Licensing basis information.	Part 53 Framework A (copies 53.1500), with modifications	Modifications made to clarify applicability under Framework B
53.6002	Specific terms and conditions of licenses	Part 53 Framework A (copies 53.1502), with modifications	Modifications made to clarify applicability under Framework B
53.6005	Changes to licensing basis information requiring prior NRC approval.	Part 53 Framework A (copies 53.1505), with modifications	Modifications made to cross-reference equivalent Framework B provisions

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Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.6010	Application for amendment of license.	Part 53 Framework A (copies 53.1510), with modifications, 10 CFR 50.90 and 10 CFR 50.91(a)(1)	Modifications made to reconcile differences between analysis requirements in Frameworks A and B to support a license amendment (Framework B aligned more closely with existing 10 CFR Part 50 provisions)
53.6015	Public notices; state consultation.	Part 53 Framework A (copies 53.1515), with modifications, and 10 CFR 50.91	Modifications made to cross-reference equivalent Framework B provisions
53.6020	Issuance of amendment.	Part 53 Framework A (copies 53.1520), with modifications, and 10 CFR 50.92	Modifications made to cross-reference equivalent Framework B provisions
53.6025	Revising certification information within a design certification rule.	Part 53 Framework A (copies 53.1525), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.6030	Revising design information within a manufacturing license.	Part 53 Framework A (copies 53.1530), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.6035	Amendments during construction.	Part 53 Framework A (copies 53.1535), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.6040	Updating licensing basis information and determining the need for NRC approval	10 CFR 50.59, with modifications	Modifications include eliminating the term 'Final Hazards Summary Report' (legacy term) and inclusion of cross-references to equivalent Framework B provisions
53.6045	Updating final safety analysis reports.	See below.	
53.6045(a)	Updating final safety analysis reports.	Part 53 Framework A (copies 53.1545(a), with modifications, and 10 CFR 50.71(e)	Modifications made to cross-reference equivalent Framework B provisions
53.6045(b)	Updating final safety analysis reports.	Part 53 Framework A (copies 53.1545(b)), with modifications, and 10 CFR 50.71(e)	Modifications made to cross-reference equivalent Framework B provisions
53.6045(c)	Updating final safety analysis reports.	10 CFR 50.71(e)(3)(iii), with modifications	Modifications made to cross-reference equivalent Framework B provisions and address when a COL applicant or holder would no longer be required to

Enclosure 1 - Summary of Framework B Requirements and Source

Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
			provide annual updates to the FSAR for new information or reevaluated conditions
53.6045(d)	Updating final safety analysis reports.	Part 53 Framework A (copies 53.1545(d)) and 10 CFR 50.71(e)(6)	Not applicable
53.6045(e)	Reserved.		
53.6045(f)	Updating final safety analysis reports.	10 CFR 50.71(f), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.6050	Evaluating changes to facility as described in final safety analysis reports.	10 CFR 50.59(c) and 10 CFR 50.59(d), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.6052	Maintenance of risk evaluations.	See below.	
53.6052(a)	Maintenance of risk evaluations.	10 CFR 50.71(h)(1), with modifications	Modifications made to include the Alternate Evaluation for Risk Insights (AERI) approach
53.6052(b)	Maintenance of risk evaluations.	10 CFR 50.71(h)(2), with modifications	Modifications made to include PRA maintenance and/or upgrade provisions for AERI and PRA
53.6052(c)	Maintenance of risk evaluations.	10 CFR 50.71(h)(3), with modifications	Modifications made to reference equivalent Framework B provisions
53.6052(d)	Maintenance of risk evaluations.	New requirement based on 10 CFR 50.71(h)(3), with modifications.	Modifications made to address the confirmation of the AERI during license renewal
53.6054	Control of aircraft impact assessments.	10 CFR 50.150(c), with modifications	Modifications made to cross-reference equivalent Part 50 provisions in Framework B
53.6055	Control of licensing basis information in program descriptions.	Part 53 Framework A (copies 53.1555), with modifications	Modifications made to reference equivalent Framework B provisions
53.6060	Updating program documents included in licensing basis information.	Part 53 Framework A (copies 53.1560), with modifications	Modifications made to reference equivalent Framework B provisions
53.6065	Evaluating changes to programs included in licensing basis information.	Part 53 Framework A (copies 53.1565), with modifications	Modifications made to reference equivalent Framework B provisions

Enclosure 1 - Summary of Framework B Requirements and Source

Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.6070	Transfer of licenses or permits.	Part 53 Framework A (copies 53.1570), with modifications, and 10 CFR 50.80	Modifications made to reference equivalent Framework B provisions
53.6075	Termination of license.	Part 53 Framework A (copies 53.1575), with modifications, and 10 CFR 50.82	Modifications made to reference equivalent Framework B provisions
53.6080	Information requests.	Part 53 Framework A (copies 53.1580), with modifications, and 10 CFR 50.54(f)	Modifications made to reference equivalent Framework B provisions.
53.6085	Revocation, suspension, modification of licenses, permits, and approvals for cause.	Part 53 Framework A (copies 53.1585), with modifications, and 10 CFR 50.100	Modifications made to reference equivalent Framework B provisions.
53.6090	Backfitting.	10 CFR 50.109, with modifications	Modifications made to reference equivalent Framework B provisions
53.6095	Renewal.	Part 53 Framework A (copies 53.1595)	Not applicable
Subpart T – Reporting and Other Administrative Requirements			
53.6300	General information.	Part 53 Framework A (copies 53.1600), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.6310	Unfettered access for inspections.	Part 53 Framework A (copies 53.1610) and 10 CFR 50.70	Not applicable.
53.6320	Maintenance of records, making of reports.	See below	
53.6320(a)	Maintenance of records, making of reports.	Part 53 Framework A (copies 53.1620(a)) and 10 CFR 50.71(a)	Not applicable
53.6320(b)	Reserved		
53.6320(c)	Maintenance of records, making of reports.	Part 53 Framework A (copies 53.1620(c)), with modifications, and 10 CFR 50.71(c)	Modifications made to distinguish records and reports generated under Framework B
53.6320(d)	Maintenance of records, making of reports.	Part 53 Framework A (copies 53.1620(d)), with modifications, and 10 CFR 50.71(d)	Modifications made to distinguish records and reports generated under Framework B
53.6320(e)	Maintenance of records, making of reports.	Policy initiative associated with reporting requirement for fee purposes	New requirement ensures licensee promptly notifies NRC of completion of power ascension testing so the NRC can assess part 171 fees

Enclosure 1 - Summary of Framework B Requirements and Source

Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.6330	Immediate notification requirements for operating commercial nuclear plants.	10 CFR 50.72, with modifications	Modifications made to cross-reference equivalent Framework B provisions; reporting requirements aligned to those in 10 CFR 50.72 due to the similarities in SSC classification between Part 50 and Framework B
53.6340	Licensee event report system.	10 CFR 50.73, with modifications	Modifications made to cross-reference equivalent Framework B provisions; reporting requirements aligned to those in 10 CFR 50.73 due to the similarities in SSC classification between Part 50 and Framework B
53.6345	Periodic reports.	Part 53 Framework A (copies 53.1645), with modifications, and 10 CFR 50.36a(a)(2)	Modifications made to cross-reference equivalent Framework B provisions
53.6350	Facility information and verification.	Part 53 Framework A (copies 53.1650) and 10 CFR 50.78	Not applicable
53.6360	Financial requirements.	Part 53 Framework A (copies 53.1660), with modifications	Modifications made to cross-reference equivalent Framework B provisions
53.6370	Financial qualifications.	Part 53 Framework A (copies 53.1670), with modifications and 10 CFR 50.33	Modifications made to distinguish applicants under Framework B
53.6380	Annual financial reports.	Part 53 Framework A (copies 53.1680) and 10 CFR 50.71(b)	Not applicable
53.6390	Licensee's change of status; financial qualifications.	See below	
53.6390(a)	Licensee's change of status; financial qualifications.	Part 53 Framework A (copies 53.1690(a)), with modifications, and 10 CFR 50.76	Modifications made to cross-reference equivalent Framework B provisions
53.6390(b)	Licensee's change of status; financial qualifications.	Part 53 Framework A (copies 53.1690(b)) and 10 CFR 50.54(cc)	Not applicable
53.6400	Creditor regulations.	Part 53 Framework A (copies 53.1700), with modifications, and 10 CFR 50.81	Modifications made to cross-reference equivalent Framework B provisions
53.6410	Financial protection.	Part 53 Framework A (copies 53.1710), with modifications	Modifications made to cross-reference equivalent Framework B provisions

Enclosure 1 - Summary of Framework B Requirements and Source

Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
53.6420	Insurance required to stabilize and decontaminate plant following an accident.	Part 53 Framework A (copies 53.1720), with modifications, and 10 CFR 50.54(w)	Modifications made to cross-reference equivalent Framework B subpart
53.6430	Financial protection requirements.	Part 53 Framework A (copies 53.1730)	Not applicable
Subpart U – Quality Assurance			
53.6600	General Provisions	Part 53 Framework A (copies 53.1800), with modifications	Modifications made to introductory text to align with introductory text in 10 CFR Part 50 Appendix B
53.6605	Organization	10 CFR Part 50 Appendix B Criterion I	Not applicable
53.6610	Quality Assurance Program	10 CFR Part 50 Appendix B Criterion II	Not applicable
53.6615	Design Control	10 CFR Part 50 Appendix B Criterion III	Not applicable
53.6620	Procurement Document Control	10 CFR Part 50 Appendix B Criterion IV	Not applicable
53.6625	Instructions, Procedures and Drawings	10 CFR Part 50 Appendix B Criterion V	Not applicable
53.6630	Document Control	10 CFR Part 50 Appendix B Criterion VI	Not applicable
53.6635	Control of Purchased Material, Equipment and Services	10 CFR Part 50 Appendix B Criterion VII, with modifications	Modifications made to adopt “commercial nuclear plant” in lieu of “nuclear power plant”.
53.6640	Identification and Control of Materials, Parts and Components	10 CFR Part 50 Appendix B Criterion VIII	Not applicable
53.6645	Control of Special Processes	10 CFR Part 50 Appendix B Criterion IX	Not applicable
53.6650	Inspection	10 CFR Part 50 Appendix B Criterion X	Not applicable
53.6655	Test Control	10 CFR Part 50 Appendix B Criterion XI	Not applicable
53.6660	Control of Measuring and Test Equipment	10 CFR Part 50 Appendix B Criterion XII	Not applicable
53.6665	Handling, Storage and Shipping	10 CFR Part 50 Appendix B Criterion XIII	Not applicable
53.6670	Inspection, Test and Operating Status	10 CFR Part 50 Appendix B Criterion XIV	Not applicable
53.6675	Nonconforming Materials, Parts or Components	10 CFR Part 50 Appendix B Criterion XV	Not applicable
53.6680	Corrective Action	10 CFR Part 50 Appendix B Criterion XVI	Not applicable
53.6685	Quality Assurance Records	10 CFR Part 50 Appendix B Criterion XVII	Not applicable
53.6690	Audits	10 CFR Part 50 Appendix B Criterion XVIII	Not applicable

Enclosure 1 - Summary of Framework B Requirements and Source

Section(s)	Section Title/Topic	Source of Draft Requirement⁽¹⁾⁽²⁾	Variance(s) from Source (if applicable)⁽³⁾
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Notes:

- (1) Several provisions in Part 53 Framework B are based on the preliminary proposed rule text for Part 53 Framework A. However, several of the provisions in Framework A are based on existing requirements in other parts of 10 CFR. Where appropriate, this column includes additional references to the sources of requirements from Framework A to assist in understanding where a given provision was derived, even if the Framework B draft preliminary proposed rule text was sourced from Framework A.
- (2) Several provisions in Framework B were derived from 10 CFR Part 50 and 10 CFR Part 52. In some cases, the provisions from these parts include additional references to other requirements (e.g., 10 CFR 52.79(a)(8) references 10 CFR 50.44). To the extent practicable, this table denotes from where a particular provision for Framework B was sourced in addition to the base requirement associated with the source. In these cases, the table denotes that the Framework B references the base requirement "by extension".
- (3) For variances that state "Modifications made to cross-reference equivalent Framework B provisions", this generally refers to a situation where the source requirement was adopted in its entirety, but conforming changes were required to address the organizational scheme in Framework B.

Enclosure 2 - Summary of Part 53 Framework B References to § 53.4730 General Technical Requirements

Part 53 Framework B Paragraph No.	Description of Part 53 Framework B Requirement	Application Type (Technical Requirements Section in Part 53 Framework B)						
		ESP (§ 53.4756)	SDA (§ 53.4809)	DC (§ 53.4839)	ML (§ 53.4879)	CP (§ 53.4909)	OL (§ 53.4969)	COL (§ 53.5016)
		53.4730(a)(1)	Site safety analysis.	See below.				
53.4730(a)(1)(i)	Site safety analysis.	X				X	X ⁵	X
53.4730(a)(1)(ii)	Site safety analysis.	X				X		X
53.4730(a)(1)(iii)	Site safety analysis.	X				X		X
53.4730(a)(1)(iv)	Site safety analysis.	X				X		X
53.4730(a)(1)(v)	Site safety analysis.	X				X		X
53.4730(a)(1)(vi)	Site safety analysis.	X	X	X	X	X		X
53.4730(a)(2)	Facility description.	X	X	X	X ⁶	X	X	X
53.4730(a)(3)	Kinds and quantities of radioactive materials.		X	X	X		X	X
53.4730(a)(4)	Design bases and principal design criteria		X	X	X	X	X	X
53.4730(a)(5)	Initiating event and accident analysis	See below.						
53.4730(a)(5)(i)	Initiating event and accident analysis – Requirement for analysis and evaluation		X	X	X	X	X	X
53.4730(a)(5)(ii)	Initiating event and accident analysis – DBA		X	X	X	X	X	X
53.4730(a)(5)(iii)	Initiating event and accident analysis – AOO		X	X	X	X	X	X
53.4730(a)(5)(iv)	Initiating event and accident analysis – BDBEs		X	X	X	X	X	X
53.4730(a)(5)(v)	Initiating event and accident analysis – severe accidents		X	X	X	X	X	X
53.4730(a)(5)(vi)	Initiating event and accident analysis - chemical hazards.		X	X	X	X	X	X
53.4730(a)(6)	Fire protection.						X	X
53.4730(a)(7)	Combustible gas control.		X	X	X	X	X	X
53.4730(a)(8)	Environmental qualification of electric equipment important to safety.	See below.						
53.4730(a)(8)(i)	Environmental qualification of electric equipment important to safety.						X	X
53.4730(a)(8)(ii)	Environmental qualification of electric equipment important to safety.		X	X	X			
53.4730(a)(9)	Role of personnel.						X	X
53.4730(a)(10)	Maintenance rule.						X	X

⁵ See § 53.4969(a)(1); the full site evaluation should include a description of changes from the CP.

⁶ See § 53.4879(b)

Enclosure 2 - Summary of Part 53 Framework B References to § 53.4730 General Technical Requirements

Part 53 Framework B Paragraph No.	Description of Part 53 Framework B Requirement	Application Type (Technical Requirements Section in Part 53 Framework B)						
		ESP (§ 53.4756)	SDA (§ 53.4809)	DC (§ 53.4839)	ML (§ 53.4879)	CP (§ 53.4909)	OL (§ 53.4969)	COL (§ 53.5016)
53.4730(a)(11)	Effluent control		X	X	X		X	X
53.4730(a)(12)	Post-accident radiation monitoring and protection.	See below.						
53.4730(a)(12)(i)	Post-accident radiation monitoring and protection		X	X	X	X	X	X
53.4730(a)(12)(ii)	Post-accident radiation monitoring and protection		X	X	X	X	X	X
53.4730(a)(12)(iii)	Post-accident radiation monitoring and protection		X	X	X	X	X	X
53.4730(a)(13)	Reserved.							
53.4730(a)(14)	Earthquake engineering criteria.		X	X	X	X	X	X
53.4730(a)(15)	Emergency plans.					X	X	X
53.4730(a)(16)	State and local government cooperation in emergency planning.						X	X
53.4730(a)(17)	Safety feature testing, analyses, operating experience, and prototypes.		X	X	X		X	X
53.4730(a)(18)	Quality assurance program.	See below.						
53.4730(a)(18)(i)	Quality assurance program	X	X	X	X	X	X	X
53.4730(a)(18)(ii)	Quality assurance program	X	X	X	X	X	X	X
53.4730(a)(18)(iii)	Quality assurance program	X	X	X	X	X	X	X
53.4730(a)(19)	Organizational structure.						X	X
53.4730(a)(20)	Managerial and administrative controls.	See below.						
53.4730(a)(20)(i)	Managerial and administrative controls						X	X
53.4730(a)(20)(ii)	Managerial and administrative controls						X	X
53.4730(a)(21)	Preoperational testing and initial startup.						X	X
53.4730(a)(22)	Normal operations and maintenance.						X	X
53.4730(a)(23)	Technical specifications.	See below.						
53.4730(a)(23)(i)	Technical specifications.						X	X
53.4730(a)(23)(ii)	Technical specifications.			X	X			
53.4730(a)(24)	Fitness-for-duty programs.						X	X
53.4730(a)(25)	Multi-unit sites					X	X	X
53.4730(a)(26)	Technical qualifications.		X	X	X	X	X	X
53.4730(a)(27)	Training program.						X	X
53.4730(a)(28)	Physical security program.						X	X
53.4730(a)(29)	Safeguards contingency plan.						X	X
53.4730(a)(30)	Operating experience.		X	X	X			X

Enclosure 2 - Summary of Part 53 Framework B References to § 53.4730 General Technical Requirements

Part 53 Framework B Paragraph No.	Description of Part 53 Framework B Requirement	Application Type (Technical Requirements Section in Part 53 Framework B)						
		ESP (§ 53.4756)	SDA (§ 53.4809)	DC (§ 53.4839)	ML (§ 53.4879)	CP (§ 53.4909)	OL (§ 53.4969)	COL (§ 53.5016)
		53.4730(a)(31)	Radiation protection program					
53.4730(a)(32)	Criticality accident requirements.		X	X	X	X		X
53.4730(a)(33)	Minimization of contamination.		X	X	X		X	X
53.4730(a)(34)	Risk evaluations.	See below.						
53.4730(a)(34)(i)	Risk evaluations – PRA		X	X	X	X	X	X
53.4730(a)(34)(ii)	Risk evaluations - AERI		X	X	X	X	X	X
53.4730(a)(35)	Aircraft impact assessment.		X	X	X	X	X	X
53.4730(a)(36)	Functional containment.	See below.						
53.4730(a)(36)(i)	Functional containment – NLWR		X	X	X		X	X
53.4730(a)(36)(ii)	Functional containment - LWR		X	X	X		X	X
53.4730(a)(37)	Water-cooled reactor requirements.	See below.						
53.4730(a)(37)(i)	Emergency core cooling systems.		X	X	X	X	X	X
53.4730(a)(37)(ii)	Codes and standards.					X	X	X
53.4730(a)(37)(iii)	Pressurized thermal shock and fracture toughness requirements.		X	X	X		X	X
53.4730(a)(37)(iv)	Anticipated transients without scram.		X	X	X		X	X
53.4730(a)(37)(v)	Station blackout.		X	X	X		X	X
53.4730(a)(37)(vi)	Reactor vessel material surveillance.						X	X
53.4730(a)(37)(vii)	Containment leakage testing.						X	X
53.4730(a)(37)(viii)	Standard review plan evaluation. ⁷	X	X		X			
53.4730(a)(37)(ix)	Resolution of generic issues.		X	X	X		X	X
53.4730(a)(37)(x)	Requirements from LWR operating experience.	See below.						
53.4730(a)(37)(x)(A)	Requirements from LWR operating experience.		X	X	X	X	X	X
53.4730(a)(37)(x)(B)	Requirements from LWR operating experience.		X	X	X	X	X	X
53.4730(a)(37)(x)(C)	Requirements from LWR operating experience.		X	X	X	X	X	X

⁷ Evaluation of the applicability of this requirement is ongoing.