

THIS PRELIMINARY PROPOSED RULE LANGUAGE AND ACCOMPANYING DISCUSSION IS BEING RELEASED TO SUPPORT INTERACTIONS WITH STAKEHOLDERS AND THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS (ACRS). THIS LANGUAGE 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 PLANS TO CONTINUE WORKING ON THE CONCEPTS AND DETAILS PROVIDED IN THIS DOCUMENT AND WILL CONTINUE TO PROVIDE OPPORTUNITIES FOR PUBLIC PARTICIPATION AS PART OF THE RULEMAKING ACTIVITIES.

THE STAFF IS PRIMARILY SEEKING INSIGHTS REGARDING THE CONCEPTS IN THIS PRELIMINARY LANGUAGE AND SECONDARILY SEEKING INSIGHTS RELATED TO DETAILS SUCH AS NUMERICAL VALUES FOR VARIOUS CRITERIA.

SUBPART H - Licenses, Certifications and Approvals – PRELIMINARY RULE LANGUAGE

(October 2021)

SUBPART H: Sections Related to Manufacturing Licenses, Construction Permits, Operating Licenses, and Combined Licenses

Preliminary Language	Discussion
<p>SUBPART H - Licenses, Certifications and Approvals</p>	<p>This portion of the preliminary rule language is a continuation of Subpart H. The first portion of Subpart H was released in August 2021 (Discussion Table, ADAMS Accession No. ML21202A178).</p> <p>There are several issues in Subpart H that relate to issues being addressed in the ongoing rulemaking on “Alignment of Licensing Processes and Lessons Learned from New Reactor Licensing” (Docket ID NRC-2009-0196) for Parts 50 and 52. Reconciliation of similar issues between that rulemaking and the Part 53 rulemaking will occur at a later date. This first iteration of Subpart H largely reflects the current version of Parts 50 and 52.</p>
<p>§ 53.1162 Relationship between sections. (a) <i>Limited work authorization.</i> ... (b) <i>Early site permit.</i></p>	<p>This section will be updated later to include text from other Part 52 “Relation to other subparts,” sections, as applicable, as well as explain relationships with</p>

...

(c) *Standard design approval.*

...

(d) *Standard design certification.*

...

(e) *Manufacturing license.* (1) A commercial nuclear power reactor module manufactured under a manufacturing license (ML) issued under this part may only be transported to and installed at a site for which either a construction permit (CP), operating license (OL), or a combined license (COL) under this part has been issued. Manufactured reactor modules licensed for factory installation of fuel can only be shipped to sites for which an appropriate license, including for the possession of special nuclear material, has been issued.

(2) A manufacturing license applicant may reference a standard design certification under § 53.1230 or a standard design approval under § 53.1220 in its application.

(3) A manufacturing license applicant must comply with 10 CFR 53.620 for all manufacturing activities.

(4) If licensed for factory installation of fuel, a license for receipt, possession, handling, and storage of special nuclear material under 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," must be obtained prior to receipt of the fuel at the manufacturer's facility.

(g) *Construction permit.*

...

(h) *Operating license.*

...

(i) *Combined licenses.* An application for a combined license under this subpart may, but need not, reference a standard design certification, standard design approval, or manufacturing license issued under §§ 53.1230, 53.1220, and 53.1240 of this subpart, respectively, or an early site permit issued under § 53.1180 of this subpart. In the absence of a demonstration that an entity other than the one originally sponsoring and obtaining a standard design certification is qualified to supply a design, the Commission will

licensing processes in this Subpart borrowed from Part 50.

Paragraph (a) is from § 52.153, with additions for factory loading of fuel. Prior to drafting preliminary proposed rule text, additional discussion with stakeholders is warranted about the ability of a manufacturing license (ML) to be referenced in a Part 53 construction permit (CP) or operating license (OL) application.

The staff is using the term "reactor module" to mean the part of the plant that is subject to the manufacturing license. This term will need to be added to the Subpart A definitions. The staff is open to suggestions for the use of another term if "reactor module" is problematic.

Paragraph (i) is from § 52.73.

<p>entertain an application for a combined license that references a standard design certification issued under § 53.1230 of this subpart only if the entity that sponsored and obtained the certification supplies the design for the applicant's use.</p>	
<p>§ 53.1240 Manufacturing licenses Sections 53.1240 through 53.1249 set out the requirements and procedures applicable to Commission issuance of a license under 10 CFR Part 53 authorizing manufacture of multiple commercial nuclear reactor modules to be installed at sites not identified in the manufacturing license application. The commercial nuclear reactor modules authorized for manufacture may be fueled at the place of manufacture, if authorized in the license, or be transported without fuel.</p>	<p>From § 52.151.</p>
<p>§ 53.1243 Filing of applications (a) Any person, except one excluded by § 53.1150, may file an application for a manufacturing license under this section with the Director, Office of Nuclear Reactor Regulation. (b) Applications related to reactor modules for which fuel is to be installed at the manufacturer's facility and fueled reactor modules are to be transported to a licensed site must also possess, apply for, or reference licenses and certifications required by 10 CFR Parts 70 and 71.</p>	<p>Paragraph (a) is from § 52.155.</p> <p>Paragraph (b) is added to address factory loading or fuel.</p>
<p>§ 53.1244 Contents of applications for manufacturing licenses; general information Each application for a manufacturing license must include the information contained in § 53.1130.</p>	<p>General format for each license type: § for General information (points to § 53.1130) § for Technical information § for Additional information</p>
<p>§ 53.1245 Contents of applications for manufacturing licenses; technical information in final safety analysis report (a) <i>Final safety analysis report.</i> The application must include a final safety analysis report containing the information set forth below, with a level of design information sufficient to enable the Commission to judge the applicant's proposed means of ensuring that the manufacturing conforms to the design and to reach a final conclusion on all safety questions associated with the design, permit the preparation of manufacturing and installation specifications by an applicant who seeks to use the manufactured reactor module,</p>	<p>Adapted from § 52.157</p> <p>The previously released portion of Subpart H will be revised to add the license type to the title of the content of application provisions for clarity when referring to these sections.</p>

and permit the preparation of acceptance and inspection requirements by the NRC.

(b) *Design information.* (1) The application must include design information equivalent to that required for a standard design certification as defined in § 53.1235 for those portions of a commercial nuclear plant included in the reactor module to be manufactured.

(2) In addition to the design information for the nuclear reactor module required by paragraph (b)(1) of this section, the final safety analysis report must also provide:

(i) Representative conceptual designs for one or more nuclear plants using the manufactured reactor modules;

(ii) If multiple nuclear reactor modules may be installed at a nuclear plant, a description of the possible operating configurations of the modules with common systems, interface requirements, and system interactions. The final safety analysis must also account for differences among the possible configurations, including any restrictions that will be necessary during the construction and startup of a given module to ensure the safe operation of any module already operating;

(3)(i) *Interface requirements.* Applications for a manufacturing license must describe the interface requirements between the manufactured reactor module and the remaining portions of the commercial nuclear power plant or connections to other facilities outside of the commercial nuclear plant.

(ii) Interface requirements must be verifiable through inspections, testing, or analysis and sufficiently detailed to allow for completion of the final safety analysis by license applicants that reference the nuclear reactor module manufactured under this part. Applicants for an OL under § 53.1270 or COL under § 53.1280 will need to verify the interface requirements at the installation site. Where appropriate, the verification of interface requirements will need to be addressed under the processes for inspections, testing, analyses and acceptance criteria (ITAAC) for COL applicants under § 53.1280.

Note that guidance will be needed to address how to make the construct of interface requirements workable for an ML that is referenced in a CP/OL. Stakeholder feedback is welcomed.

(iii) Applications for a manufacturing license referencing a standard design certification under § 53.1230 must describe the disposition of ITAAC contained in the certified design, including those to be completed at the manufacturing facility and those that would be completed at the installation site. ITAAC to be addressed at the installation site will need to be addressed by applications for an OL under § 53.1270 or COL under § 53.1280.

(iv) The final safety analysis report must identify potential pathways for radionuclides produced within the module to enter interfacing systems to support development of monitoring programs required under Subpart F.

(c) *Manufacturing information.* The application must include the following information related to the manufacturing processes, organization, controls, and inspections:

(1) A description, including references to generally accepted consensus codes and standards, of the processes that will be used to procure, fabricate, and assemble components that make up the manufactured reactor module, as required by Subpart E. The description should clearly define which activities are proposed to be within the scope of the manufacturing license and those, such as the making of a component to be procured from a separate company for installation in the manufactured reactor module, that are not considered to be within the scope of the manufacturing license.

(2) A description of the organizational and management structure singularly responsible for direction of design and manufacture of the reactor modules. The information should include a description of the management plan, technical qualifications, and controls in place to meet the requirements of § 53.620, including those for any facility performing an activity within the scope of the manufacturing license.

(3) A description of the inspections and tests to be performed as part of the manufacturing process, including the inspection of procured components, inspection and testing of fabrication processes such as the molding, welding, or coating of components, and inspections and testing of the assembled nuclear reactor module. Where applicable, the description should identify where the

The staff is soliciting stakeholder views on the translation of ITAAC from a standard design certification through possible licensing paths involving CPs/OLs. The staff is proposing to track the ITAAC as technical requirements through a process such as conditions on a CP. The reviews of an OL application would then confirm the conditions without introducing other ITAAC processes from Part 52.

inspections and tests are used to close ITAAC from standard design approvals under § 53.1220 or standard design certifications under § 53.1230 referenced in the application for a manufacturing license.

(d) *Deployment of the completed nuclear reactor module.*

The application must include the following information related to the deployment of a manufactured nuclear reactor module:

(1) Procedures governing the preparation of the manufactured reactor module for shipping to the site where it is to be operated, the conduct of shipping, and verifying the condition of the manufactured reactor module upon receipt at the site;

(2) Details of the interaction of the design and manufacture within the applicant's organization and the manner by which the applicant will ensure close integration between the designer and any party involved in the manufacture of a reactor module;

(3) Details of the interaction of the design, manufacture, and installation of a manufactured reactor module within the applicant's organization and the manner by which the applicant will ensure close integration between the designer, manufacturer, and any facility in which the reactor module is to be installed;

(4) A description of the measures used for the control of interfaces, including the consideration of key site parameters, among the designer, the manufacturer and the owner/operator of the commercial nuclear plant, as required by § 53.490;

(5) Confirmation that the interface requirements for the manufactured reactor are verifiable through inspections, testing or analysis and that they can be incorporated into the safety analysis for a CP, OL or COL. Where appropriate, the verification of interface requirements will need to address ITAAC for standard design certifications referenced in a manufacturing license and deployed to a site with a CP, OL, or COL. Certain verifications may also need to be addressed, as applicable, under the processes for ITAAC for COL applicants under § 53.1280.

(6) A description of the proposed post-construction inspections, tests, analyses and verifications, including acceptance criteria, as required in § 53.710, that are necessary and sufficient to provide reasonable assurance that the manufactured reactor was

Stakeholder feedback: a designer, a manufacturer, and an applicant for a facility license could all be different entities. Is there a specific model the staff should focus on, given potential applicant deployment strategies?

Consider adding terms "designer", "manufacturer", and "owner/operator" to next iteration of Subpart A.

built as designed and is compatible with the rest of the plant. If the application references a standard design certification issued under § 53.1238, the ITAAC contained in the certified design must apply to those portions of the manufactured reactor covered by the standard design certification.

(e) *Special considerations for factory fueling.* In addition to the above paragraphs, an application for a manufacturing license for a nuclear reactor module that includes the installation of fuel at the factory must include the following information related to the fueling operations and the needed precautions to prevent inadvertent criticality and to otherwise ensure the safety of workers and the public during the manufacture, storage, and transport of the nuclear reactor module:

(1) The application for a manufacturing license for a nuclear reactor module must include a description of the safety program and integrated safety analysis required by Subpart H of Part 70 of this Chapter. The description shall include the procedures to be used for receipt, storage and loading of the fuel into the manufactured nuclear reactor module. The description may be in the form of a reference to the applicable Part 70 application and license, if issued, or within the safety analysis report supporting the manufacturing license if a combined application is used for the manufacturing license and Part 70 license.

(i) The application should specifically address the measures taken for fuel loading, in-factory inspections and testing, including precautions to be taken to prevent inadvertent criticality, and an analysis of the safety and security of the nuclear reactor module within the factory, during possible periods of storage, and during transportation to the licensed site. The storage and transport of a fueled reactor module must comply with applicable regulations in Parts 70, 71, and 73 of this chapter.

(ii) The application should specifically address the functional design criteria and design features included in the manufactured nuclear reactor module or physical or programmatic measures added to the module during manufacturing, storage, or transport to

<p>prevent inadvertent criticality during various conditions and when subject to potential hazards and human errors.</p> <p>(2) A description of the procedures governing the transfer of authorities and responsibilities for the manufactured nuclear reactor module from the holder of the manufacturing license to the holder of the licenses for the installation site.</p> <p>(3) A fitness for duty program, in accordance with § 53.620(a)(4) and 10 CFR part 26.</p> <p>(4) A Radiation Protection Program in accordance with § 53.620(a)(7).</p> <p>(5) An information security program in accordance with § 53.620(a)(8).</p> <p>(6) A cyber security program in accordance with § 53.620(a)(9).</p> <p>(7) A physical security program in accordance with § 53.620(b)(1)(iv)(E).</p> <p>(8) A fire protection program in accordance with § 53.620(b)(1)(iv)(B).</p> <p>(9) An emergency plan in accordance with § 53.620(b)(1)(iv)(C).</p> <p>(10) A description of the plant staff training program in accordance with § 53.620(b)(1)(iv)(D).</p>	
<p>§ 53.1246 Contents of applications for manufacturing licenses; other application content</p> <p>The application must include an environmental report as required by 10 CFR 51.54. If the manufacturing license application references a standard design certification, the environmental report need not contain a discussion of severe accident mitigation design alternatives for the reactor module as used in a commercial nuclear plant. Nonetheless, an application for a manufacturing license that references a standard design certification that includes the installation of fuel at the factory must discuss severe accident mitigation design alternatives for the reactor module while at the factory and must also discuss severe accident mitigation alternatives for the factory itself.</p>	<p>Adapted from § 52.158.</p> <p>NRC staff is interested in stakeholder views related to SAMDA evaluations for manufacturing license applicants.</p>

§ 53.1247 Standards for review of applications, referral to ACRS, and issuance of a manufacturing license

(a) *Review of applications.* Applications filed under this subpart will be reviewed according to the applicable standards set out in this subpart as well as applicable standards in 10 CFR parts 20, 25, 26, 51, 53, 70, 71, 73, and 75.

(b) *Administrative review of applications, hearings;* A proceeding on a manufacturing license is subject to all applicable procedural requirements contained in 10 CFR part 2, including the requirements for docketing in §§ 2.101(a)(1) through (4) of this chapter, and the requirements for issuance of a notice of proposed action in § 2.105 of this chapter, *provided, however*, that the designated sections may not be construed to require that the environmental report or draft or final environmental impact statement include an assessment of the benefits of constructing and/or operating the manufactured reactor module or an evaluation of alternative energy sources. All hearings on manufacturing licenses are governed by the hearing procedures contained in 10 CFR part 2, subparts C, E, G, L, and N.

(c) *Referral to Advisory Committee on Reactor Safeguards (ACRS).* The Commission shall refer a copy of the application to the ACRS. The ACRS shall report on those portions of the application which concern safety.

(d) *Issuance of manufacturing license.* (1) After completing any hearing under this section, and receiving the report submitted by the ACRS, the Commission may issue a manufacturing license if the Commission finds that:

(i) Applicable standards and requirements of the Act and the Commission's regulations have been met;

(ii) There is reasonable assurance that the reactor modules will be manufactured, and can be transported, incorporated into a nuclear plant, and operated in conformity with the manufacturing license, the provision of the Act, and the Commission's regulations;

(iii) The proposed reactor modules can be incorporated into a nuclear plant and operated at sites having characteristics that fall within the site parameters postulated for the design of the

Note that this section does not address the potential removal of the manufactured reactor module from the operating site.

Adapted from §§ 52.159, 52.165, and 52.167

manufactured reactor modules without undue risk to the health and safety of the public;

(iv) The applicant is technically qualified to design and manufacture the proposed nuclear power reactor modules;

(v) The proposed inspections, tests, analyses and acceptance criteria are necessary and sufficient, within the scope of the manufacturing license, to provide reasonable assurance that the manufactured reactor module has been manufactured and will be operated in conformity with the license, the provisions of the Act, and the Commission's regulations;

(vi) The issuance of a license to the applicant will not be inimical to the common defense and security or to the health and safety of the public; and

(vii) The findings required by subpart A of part 51 of this chapter have been made.

(2) Each manufacturing license issued under this subpart shall specify:

(i) Terms and conditions as the Commission deems necessary and appropriate;

(ii) Technical specifications for operation of the manufactured reactor module, as the Commission deems necessary and appropriate;

(iii) Site parameters and design characteristics for the manufactured reactor module; and

(iv) The interface requirements to be met by the site-specific elements of the facility, such as the energy conversions systems and ultimate heat sink, not within the scope of the manufactured reactor module.

(3)(i) A holder of a manufacturing license may not transport or allow to be removed from the place of manufacture the manufactured reactor module except to the site of a licensee with either a construction permit, operating license, or a combined license under subpart H of this part. The construction permit, operating license or combined license must authorize the construction and operation of a nuclear power facility using the manufactured reactor modules.

As previously mentioned, the staff is interested in stakeholder insights related to a licensing model for possible stages in the manufacture, transport, storage (at site), installation, operation, removal, storage (at site), transport, refurbishment, and disposal of a reactor module. Part 53 might not address the back end of this cycle.

<p>(ii) A holder of a manufacturing license shall include, in any contract governing the transport of a manufactured reactor module from the place of manufacture to any other location, a provision requiring that the person or entity transporting the manufactured reactor module to comply with all NRC-approved shipping requirements in the manufacturing license.</p>	
<p>§ 53.1248 Finality of manufacturing licenses; information requests</p> <p>(a)(1) Notwithstanding any provision in 10 CFR 53.1380, during the term of a manufacturing license the Commission may not modify, rescind, or impose new requirements on the design of the nuclear reactor module being manufactured, or the requirements for the manufacture of the nuclear reactor module, unless the Commission determines that a modification is necessary to bring the design of the reactor module or its manufacture into compliance with the Commission's requirements applicable and in effect at the time the manufacturing license was issued, or to provide reasonable assurance of adequate protection to public health and safety or common defense and security.</p> <p>(2) Any modification to the design of a manufactured nuclear reactor module which is imposed by the Commission under paragraph (a)(1) of this section will be applied to all reactor modules manufactured under the license, including those that have already been transported and sited, except those reactor modules to which the modification has been rendered technically irrelevant by action taken under paragraph (b) of this section.</p> <p>(3) In making the findings required under this part for issuance of a construction permit, operating license, combined license, in any hearing under § 53.1307, or in any enforcement hearing other than one initiated by the Commission under paragraph (a)(1) of this section, for which a nuclear reactor module manufactured under this subpart is referenced or used, the Commission shall treat as resolved those matters resolved in the proceeding on the application for issuance or renewal of the manufacturing license, including the adequacy of design of the manufactured reactor module, the costs and benefits of severe accident mitigation design alternatives, and</p>	<p>Based on § 52.171.</p>

<p>the bases for not incorporating severe accident mitigation design alternatives into the design of the reactor module to be manufactured.</p> <p>(b)(1) The holder of a manufacturing license may not make changes to the design of the nuclear reactor module authorized to be manufactured without prior Commission approval. The request for a change to the design must be in the form of an application for a license amendment, and must meet the requirements of §§ 53.1311, 53.1313, and as applicable 53.1315.</p> <p>(2) An applicant or licensee who references or uses a nuclear reactor module manufactured under a manufacturing license under this subpart may request a departure from the design characteristics, site parameters, terms and conditions, or approved design of the manufactured reactor module in accordance with § 53.1316.</p> <p>(c) Except for information requests seeking to verify compliance with the current licensing basis of either the manufacturing license or the manufactured reactor module, information requests to the holder of a manufacturing license or an applicant or licensee using a manufactured reactor module must be evaluated before issuance to ensure that the burden to be imposed on respondents is justified in view of the potential safety significance of the issue to be addressed in the requested information. Each evaluation performed by the NRC must be in accordance with § 53.1360 and must be approved by the Executive Director for Operations or his or her designee before issuance of the request.</p>	
<p>§ 53.1249 Duration, transfer, and renewal of manufacturing licenses</p> <p>(a) <i>Duration.</i> A manufacturing license issued under this subpart may be valid for not less than 5, nor more than 15 years from the date of issuance. Upon expiration of the manufacturing license, the manufacture of any uncompleted reactor modules must cease unless a timely application for renewal has been docketed with the NRC.</p> <p>(b) <i>Transfer.</i> A manufacturing license may be transferred in accordance with § 53.1340 of this chapter.</p>	<p>Based on §§ 52.173, 52.175, 52.177, and 52.179</p>

(c) *Renewal.* (1)(i) Not less than 12 months, nor more than 5 years before the expiration of the manufacturing license, or any later renewal period, the holder of the manufacturing license may apply for a renewal of the license. An application for renewal must contain all information necessary to bring up to date the information and data contained in the previous application.

(ii) The filing of an application for a renewed license must be in accordance with subpart A of 10 CFR part 2 and 10 CFR 53.xxxx.

(iii) A manufacturing license, either original or renewed, for which a timely application for renewal has been filed, remains in effect until the Commission has made a final determination on the renewal application, *provided, however*, that in accordance with § 53.xxxx, the holder of a manufacturing license may not begin manufacture of a reactor module less than 6 months before the expiration of the license.

(iv) Any person whose interest may be affected by renewal of the permit may request a hearing on the application for renewal. The request for a hearing must comply with 10 CFR 2.309. If a hearing is granted, notice of the hearing will be published in accordance with 10 CFR 2.104.

(v) The Commission shall refer a copy of the application for renewal to the Advisory Committee on Reactor Safeguards (ACRS). The ACRS shall report on those portions of the application which concern safety and shall apply the criteria set forth in § 53.1247.

(2) The Commission may grant the renewal if the Commission determines:

(i) The manufacturing license complies with the Atomic Energy Act, as amended, and the Commission's regulations and orders applicable and in effect at the time the manufacturing license was originally issued; and

(ii) Any new requirements the Commission may wish to impose are:

(A) Necessary for adequate protection to public health and safety or common defense and security;

The staff seeks stakeholder views on (c)(iii) and in particular the preliminary language prohibiting beginning manufacture of a module less than 6 months before expiration of the license (revised from 3 years in Part 52).

<p>(B) Necessary for compliance with the Commission's regulations and orders applicable and in effect at the time the manufacturing license was originally issued; or</p> <p>(C) A substantial increase in overall protection of the public health and safety or the common defense and security to be derived from the new requirements, and the direct and indirect costs of implementation of those requirements are justified in view of this increased protection.</p> <p>(3) A renewed manufacturing license may be issued for a term of not less than 5, nor more than 15 years, plus any remaining years on the manufacturing license then in effect before renewal. The renewed license shall be subject to the requirements of § 53.1248.</p>	
<p>§ 53.1260 Construction permits</p> <p>Sections 53.1260 through 53.1269.1 set out the requirements and procedures applicable to Commission issuance of a construction permit for commercial nuclear plants. A construction permit for the construction of a commercial nuclear plant under this part will be issued before the issuance of an operating license if the application is otherwise acceptable and will be converted upon completion of the facility and Commission action, into an operating license as provided under §§ 53.1270 through 53.1279.</p>	
<p>§ 53.1262 Relationship to other sections</p> <p>An application for a construction permit under this part may, but need not, reference an early site permit, standard design approval, manufacturing license, or standard design certification issued under this part.</p>	<p>This text will be moved to § 53.1162, "Relationship between sections."</p>
<p>§ 53.1264 Contents of applications for construction permits; general information</p> <p>An application for a construction permit must supplement the information required by § 53.1130 with the following information:</p> <p>(a) Except for an electric utility applicant, information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in § 53.1561, the activities for which the permit is sought. As applicable, the following should be provided:</p>	<p>From § 50.33.</p> <p>Refer also to general content requirements in § 53.1130.</p>

<p>(1) The applicant must submit information that demonstrates that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs and related fuel cycle costs. The applicant must submit estimates of the total construction costs and related fuel cycle costs of the facility and shall indicate the source(s) of funds to cover these costs.</p> <p>(2) Each application for a construction permit submitted by a newly-formed entity organized for the primary purpose of constructing and operating a facility must also include information showing:</p> <ul style="list-style-type: none"> (i) The legal and financial relationships it has or proposes to have with its stockholders or owners; (ii) The stockholders' or owners' financial ability to meet any contractual obligation to the entity which they have incurred or proposed to incur; and (iii) Any other information considered necessary by the Commission to enable it to determine the applicant's financial qualification. <p>(3) The Commission may request an established entity or newly-formed entity to submit additional or more detailed information respecting its financial arrangements and status of funds if the Commission considers this information appropriate. This may include information regarding an applicant's ability to continue the conduct of the activities authorized by the construction permit and to decommission the facility.</p> <p>(b) If the applicant proposes to construct or alter a facility, the application must state the earliest and latest dates for completion of the construction or alteration.</p>	
<p>§ 53.1265 Contents of applications for construction permits; technical information in preliminary safety analysis report</p> <p>The application must contain a preliminary safety analysis report (PSAR) that describes the facility, presents the design bases and the limits on its operation, and presents a preliminary safety analysis of the structures, systems, and components of the facility as a whole. The PSAR shall include the following information, at a level of detail sufficient to enable the Commission to reach a</p>	<p>Revised to reference ESPs and DCs as baseline for content of application.</p>

conclusion on safety matters that must be resolved by the Commission before issuance of a construction permit:

(a) *Site information.* An application for a construction permit for a commercial nuclear reactor must include the site information equivalent to that required for an early site permit in §§ 53.1185(a)(1)(iv)-(viii).

(b) *Design information.* Except as specified in this paragraph, an application for a construction permit for a commercial nuclear reactor must include the design information equivalent to that required for a standard design certification as defined in §§ 53.1235(a)(2)-(19).

(1) *Preliminary design information.* The information provided in the application may include some aspects of the design that are not fully developed, and the information is therefore preliminary. The completed design, including any changes during construction, must be described in the final safety analysis report required in § 53.1275 that supports an application for an operating license.

(2) *Planned research or testing.* Descriptions of how design features and related functional design criteria will fulfill the safety criteria in Subpart B that have been or will be demonstrated through either analysis, appropriate test programs, experience, or a combination thereof. Where any design feature has not been fully developed or demonstrated to fulfill the functional design criteria at the time of an application for a construction permit, the applicant must provide a plan for future analysis, research and development, test programs, gathering of experience, or a combination thereof to provide reasonable confidence that the required demonstration will be available for an application for an operating license.

(3) *Programmatic controls and interfaces.* Descriptions of the programmatic controls and interfaces may include those expected to be provided in the final safety analysis report because they are necessary to achieve and maintain the reliability and capability of SSCs relied upon to meet the established safety criteria, functional design criteria, and performance objectives in Subpart B.

Staff is considering how to address the role of the CP in Part 53 generally and how to incorporate concept of referencing an ESP in CP and OL sections, either repeating text similar to what is included in COL section or including generically upfront (e.g., § 53.1162, Relationship between sections).

Some expected changes to § 53.1235 include:

- (1) Adding provisions to address design requirements in § 53.440 such as fire protection, degradation mechanisms, and minimization of contamination (10 CFR 20.1406)
- (2) Adding a provision for designs needing to periodically replace major components to describe design elements and associated programmatic controls needed to support the removal, replacement, and storage of the subject components.
- (3) A description of the assessment related to the role of personnel in ensuring safe operations considering the analyses required by § 53.753. This preliminary assessment for a construction permit will include initial estimates of staffing plans and the anticipated operations staffing using the criteria in § 53.755.

Regarding paragraph (b)(1), the requirement for a description of the probabilistic risk assessment (PRA) required by § 53.450(a) and its results, PRAs for plants prior to construction shall be based on the design and other information available at the time of the application. PRAs performed in early design stages or prior to construction may be inherently less detailed and supported by a list of assumptions that will be subsequently verified or revised when the plant is built. The updated information and results

<p>(c) <i>Technical qualifications.</i> A description of the technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter.</p> <p>(d) <i>Emergency preparedness.</i> A preliminary description of the plans for coping with emergencies.</p> <p>(e) <i>Physical security.</i> A report that provides a preliminary description of how the site characteristics support the development of adequate security plans and measures consistent with the requirements in § 53.540.</p> <p>(f) <i>Safeguards information.</i> A description of the program to protect Safeguards Information against unauthorized disclosure in accordance with the requirements in §§ 73.21 and 73.22 of this chapter, as applicable.</p>	<p>will be described in the final safety analysis report. The NRC staff seeks stakeholder views on the level of information to be provided related to PRAs for CPs.</p> <p>Paragraph (c) is from § 50.34(a)(9).</p> <p>Paragraph (d) is from §§ 50.34(a)(10) & 53.820.</p> <p>Paragraph (e) is from § 50.34(c) and Part 73.</p> <p>Paragraph (f) is from § 50.34(d) and Part 73.</p>
<p>§ 53.1266 Contents of applications for construction permits; other application content.</p> <p>(a) In addition to the PSAR, the application must also include the following:</p> <p>(1) <i>Environmental report.</i></p> <p>(i) An environmental report either in accordance with 10 CFR 51.50(c) if a limited work authorization under in § 53.1170 is not requested in conjunction with the construction permit application, or in accordance with §§ 51.49 and 51.50(c) of this chapter if a limited work authorization is requested in conjunction with the construction permit application.</p> <p>(ii) If the applicant wishes to request that a limited work authorization under § 53.1170 be issued before issuance of the construction permit, the application must include the information otherwise required by § 53.1170, in accordance with either 10 CFR 2.101(a)(1) through (a)(4), or 10 CFR 2.101(a)(9).</p> <p>(b) If the construction permit application references an early site permit, standard design approval, manufacturing license, or standard design certification, then the following requirements apply:</p> <p>(1) The PSAR need not contain information or analyses submitted to the Commission in connection with the referenced NRC approval, permit, license or certification, provided, however, that the PSAR incorporates the material by reference and where appropriate</p>	<p>From § 50.30(f)</p> <p>From § 53.1170</p> <p>From § 52.79(b)</p>

<p>confirms that the site and design of the facility falls within parameter limits established in the referenced NRC approval, license, or certification.</p> <p>(2) The PSAR must demonstrate that all terms and conditions that have been included in the referenced NRC approval, license, or certification will be satisfied by the date of issuance of the operating license. If the PSAR does not demonstrate that the site or design of the facility falls within the site characteristics and design parameters, the application shall include appropriate requests for a departure, variance, or exemption that complies with the requirements of this part related to the subject referenced NRC approval, license, or certification.</p> <p>(3) If a referenced early site permit approves complete and integrated emergency plans, or major features of emergency plans, then the PSAR must include any new or additional information that updates and corrects the information that was provided under § 53.1185(b)(2), and discuss whether the new or additional information materially changes the bases for compliance with the applicable requirements.</p>	<p>From §§ 52.63 and 52.93. Also addressed in RG 1.206, Rev 1, Section C.1.7</p>
<p>§ 53.1267 Standards for review of applications</p> <p>Applications filed under this subpart will be reviewed according to the standards set out in 10 CFR parts 20, 51, 53, [54], 73, and 140.</p>	<p>From § 52.81 A decision has not been made as to whether a future section will be added to Part 53 to address license renewal or whether Part 54 will be amended to address Part 53 licensees.</p>
<p>§ 53.1267.1 Finality of referenced NRC approvals, licenses and certifications</p> <p>If the application for a construction permit under this part references an NRC approval, license, including early site permit, or certification, the scope and nature of matters resolved for the application are governed by the relevant provisions addressing finality, including §§ 53.1199, 53.1239, and 53.1229.</p>	
<p>§ 53.1267.2 Administrative review of applications; hearings</p> <p>A proceeding on a construction permit application is subject to all applicable procedural requirements contained in 10 CFR part 2, including the requirements for docketing (§ 2.101 of this chapter) and issuance of a notice of hearing (§ 2.104 of this chapter). All</p>	<p>From §§ 50.58 and 52.85</p>

<p>hearings on construction permit applications are governed by the procedures contained in 10 CFR part 2.</p>	
<p>§ 53.1267.3 Referral to the Advisory Committee on Reactor Safeguards (ACRS) The Commission shall refer a copy of the application to the ACRS. The ACRS shall report on those portions of the application that concern safety and shall apply the standards referenced in § 53.1267, in accordance with the finality provisions in § 53.1267.1.</p>	<p>From §§ 50.58 and 52.87</p>
<p>§ 53.1267.4 Authorization to conduct limited work authorization activities (a) If the application does not reference an early site permit which authorizes the holder to perform the activities under § 53.1170 [50.10(d)], the applicant may not perform those activities without obtaining the separate authorization required by § 53.1170. Authorization may be granted only after the presiding officer in the proceeding on the application has made the findings and determination required by § 53.1170(X), and the Director of the Office of Nuclear Reactor Regulation makes the determination required by § 53.1170(X). (b) If, after an applicant has performed the activities permitted by paragraph (a) of this section, the application for the construction permit is withdrawn or denied, then the applicant shall implement an approved site redress plan.</p>	<p>From § 50.10(g)</p>
<p>§ 53.1267.5 Exemptions, departures, and variances (a) Applicants for a construction permit under this subpart, or any amendment to a construction permit, may include in the application a request for an exemption from one or more of the Commission's regulations. The Commission may grant a request if it determines that the exemption complies with § 53.080. (b) An applicant for a construction permit who has filed an application referencing a NRC approval, license, or certification issued under this part may include in the application a request for departures, variances, or exemptions related to the subject referenced NRC approval, license, or certification. In determining whether to grant the departure, variance, or exemption, the Commission shall apply the same technically relevant criteria as</p>	<p>From §§ 50.11 and 52.93</p> <p>From §§ 52.39(d) and 52.93</p>

periodic reports of the progress and results of research and development programs designed to resolve safety questions.	
<p>§ 53.1268.1 Finality of construction permits</p> <p>A construction permit constitutes an authorization to proceed with construction but does not constitute Commission approval of the safety of any design feature or specification unless the applicant specifically requests such approval and such approval is incorporated in the permit. The applicant, at its option, may request such approvals in the construction permit or by amendment to the construction permit. If approved by the NRC and included in the permit, the NRC will consider modifications to the approved design features or specifications in accordance with § 53.1380.</p>	From §§ 50.35(b) and (c)
<p>§ 53.1268.2 Construction activities</p> <p>A construction permit holder must meet the requirements in § 53.610 prior to beginning construction activities. The permit holder must notify NRC at least 30 days prior to the start of construction that all requirements described in § 53.610 have been or will be met.</p>	From § 53.610
<p>§ 53.1268.4 Duration of construction permit</p> <p>(a) A construction permit will state the earliest and latest dates for completion of construction or alteration of the facility;</p> <p>(b) If the proposed construction or alteration of the facility is not completed by the latest completion date, the construction permit shall expire, and all rights forfeited. However, upon good cause shown, the Commission will extend the completion date for a reasonable period of time. The Commission will recognize, among other things, developmental problems attributed to the experimental nature of the facility or fire, flood explosion, strike, sabotage, domestic violence, enemy action, an act of the elements and other acts beyond the control of the permit holder, as a basis for extending the completion date.</p>	From § 50.55(a) From § 50.55(b)
<p>§ 53.1269 Transfer of construction permits</p> <p>A construction permit may be transferred in accordance with § 53.1340 of this part.</p>	From § 50.80
§ 53.1269.1 Termination of construction permits	From §§ 52.3(b)(8) and 52.110(a)(1)

<p>When a permit holder has determined to permanently cease construction, the holder shall, within 30 days, submit a written certification to the NRC.</p>	
<p>§ 53.1270 Operating licenses Sections 53.1270 through 53.1279 set out the requirements and procedures applicable to Commission issuance of an operating license for a nuclear power facility.</p>	
<p>§ 53.1272 Relationship to other sections (a) The holder of a construction permit issued under § 53.1260 of this section must, at the time of submission of the final safety analysis report (FSAR), file an application for an operating license under this section. (b) An application for an operating license under this part may, but need not, reference an early site permit, standard design approval, manufacturing license, or standard design certification issued under this part.</p>	<p>This text will be moved to § 53.1162, "Relationship between sections." Paragraph (a) is from § 50.30(d).</p> <p>The staff would be interested in stakeholder views on the need to address references in an OL application that were not included at the CP stage.</p>
<p>§ 53.1274 Contents of applications for operating licenses; general information An application for an operating license must supplement the information required by § 53.1130 with the following information: (a) Except for an electric utility applicant, information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the license is sought. As applicable, the following should be provided: (1) The applicant shall submit information that demonstrates the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license. The applicant shall submit estimates for total annual operating costs for each of the first five years of operation of the facility. The applicant shall also indicate the source(s) of funds to cover these costs. [An applicant seeking to renew or extend the term of an operating license for a power reactor need not submit the financial information that is required in an application for an initial license.]</p>	<p>Refer also to general content requirements in § 53.1130. Paragraph (a) is from § 50.33(f)</p> <p>Bracketed text in paragraph (a)(1) to be moved in Renewal section in Subpart I at a later date.</p>

<p>(2) Each application for an operating license submitted by a newly-formed entity organized for the primary purpose of operating the facility must also include information showing:</p> <ul style="list-style-type: none"> (i) The legal and financial relationships it has or proposes to have with its stockholders or owners; (ii) The stockholders' or owners' financial ability to meet any contractual obligation to the entity which they have incurred or proposed to incur; and (iii) Any other information considered necessary by the Commission to enable it to determine the applicant's financial qualification. <p>(3) The Commission may request an established entity or newly-formed entity to submit additional or more detailed information respecting its financial arrangements and status of funds if the Commission considers this information appropriate. This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility.</p> <p>(b) Information in the form of a report, as described in Subpart G, indicating how reasonable assurance will be provided that funds will be available to decommission the facility.</p>	<p>Paragraph (b) is from § 50.75.</p>
<p>§ 53.1275 Contents of applications for operating licenses; technical information in final safety analysis report</p> <p>The application must contain a final safety analysis report (FSAR) that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components of the facility as a whole. The final safety analysis report shall include the following information, at a level of detail sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of an operating license:</p> <p>(a) <i>Site information.</i> An application for an operating license for a commercial nuclear reactor must include the site information equivalent to that required for an early site permit in §§ 53.1185(a)(1)(iv)-(viii).</p>	<p>From § 50.34(b)</p> <p>Revised like other sections to reference ESPs and DCs as baseline for content of application. The FSAR will include and, as needed, update information provided in the PSAR which was submitted and reviewed to support the CP.</p> <p>Staff is considering how to incorporate concept of referencing an ESP in CP and OL sections, either repeating text similar to what is included in COL section or including generically upfront (e.g., § 53.1162, Relationship between sections).</p>

<p>(b) <i>Design information.</i> Except as specified in this paragraph, an application for an operating license for a commercial nuclear reactor must include the final design information equivalent to that required for a standard design certification as defined in §§ 53.1235(a)(2)-(19).</p> <p>(c) <i>Technical qualifications.</i> A description of the technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter.</p> <p>(d) <i>Integrity assessment program.</i> A description of an Integrity Assessment Program that addresses the elements described in § 53.850.</p> <p>(e) <i>Safeguards information.</i> A description of the program to protect Safeguards Information against unauthorized disclosure in accordance with the requirements in §§ 73.21 and 73.22 of this chapter, as applicable.</p> <p>(f) <i>Emergency response facility or facilities.</i> Description of location and capabilities to be established for command and control, support, and coordination of onsite and offsite, as applicable, functions during reactor accident conditions.</p> <p>(g)(1) A description of the completed assessments related to the role of personnel in ensuring safe operations considering the analyses required by § 53.753. These assessments will include:</p> <ul style="list-style-type: none"> (i) Human Factors Engineering Design Requirements (ii) Human System Interface Design Requirements (iii) Concept of Operations (iv) Functional Requirements Analysis and Function Allocation <p>(2) initial estimates of staffing plans and the anticipated operations staffing using the criteria in § 53.755.</p> <p>(h) <i>Operator training program.</i> reserved pending development of Subpart F</p> <p>(i) <i>Operator requalification program.</i> reserved pending development of Subpart F</p> <p>(j) <i>Emergency plan.</i> Emergency plans complying with the requirements of § 53.820 of this Part.</p> <p>(1) Include all emergency plan certifications, as applicable, that have been obtained from the State and local governmental</p>	<p>The staff would be interested in stakeholder views on the need to address references in an OL application (e.g., ESP) if not included at the CP stage.</p> <p>Expected changes to § 53.1235 identified in CP section.</p> <p>From § 50.34(b)(7)</p> <p>From § 53.850</p> <p>From 52.79(36)(v)</p> <p>From § 53.753 and Part 55</p> <p>From § 53.765 and Part 55</p> <p>From § 53.820 - Paragraph (a)(14) will be updated following completion of the rulemaking on “Emergency Preparedness Requirements for Small Modular Reactors and Other New Technologies” (Docket ID NRC-2015-0225) for “participating</p>
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agencies with emergency planning responsibilities that are wholly or partially within the emergency planning zone plume exposure pathway. These certifications must state that:

- (i) The proposed emergency plans are practicable;
- (ii) These agencies are committed to participating in any further development of the plans, including any required field demonstrations; and
- (iii) These agencies are committed to executing their responsibilities under the plans in the event of an emergency.

(2) If certifications cannot be obtained after sustained, good faith efforts by the applicant, then the application must contain information, including a utility plan, sufficient to show that the proposed plans provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the site.

(3) If complete and integrated emergency plans were approved as part of an early site permit, or submitted, reviewed and approved as part of the construction permit application, new certifications meeting the requirements of paragraph (14)(i) of this section are not required.

(k) *Organization.* A description of the applicant's organizational structure, allocations or responsibilities and authorities, and personnel qualifications requirements for operation.

(l) *Maintenance program.* A description of a maintenance program that meets the requirements in § 53.730 of this part.

(m) *Quality assurance.* A design control and quality assurance program description that meets the requirements of §§ 53.740 and 53.840 of this part.

(n) *Radiation protection program.* A radiation protection program description that meets the requirements of § 53.810.

(o) *Security program.* A physical security plan that describes how the applicant will meet the requirements of § 53.830 of this part (and 10 CFR part 11, if applicable, including the identification and description of jobs as required by § 11.11(a) of this chapter, at the proposed facility). The program must list tests, inspections, audits,

Tribes.”

From § 53.730

From §§ 53.740 and 53.840

From § 53.810

From § 53.830 and Part 73

<p>and other means to be used to demonstrate compliance with the requirements of 10 CFR parts 11 and 73, if applicable.</p>	<p>From § 53.830 and Part 73</p>
<p>(p) <i>Safeguards contingency plan.</i> A safeguards contingency plan in accordance with the criteria set forth in appendix C to 10 CFR part 73. The safeguards contingency plan shall include plans for dealing with threats, thefts, and radiological sabotage, as defined in part 73 of this chapter, relating to the special nuclear material and nuclear facilities licensed under this chapter and in the applicant's possession and control. Each application for this type of license shall include the information contained in the applicant's safeguards contingency plan. (Implementing procedures required for this plan need not be submitted for approval.)¹</p>	<p>From § 53.830 and Part 73</p>
<p>(q) <i>Security training and qualification.</i> A training and qualification plan must describe how the applicant will meet the criteria set forth in 10 CFR 73.100 or appendix B to 10 CFR part 73.</p>	<p>From § 53.830 and Part 73</p>
<p>(r) <i>Cyber security plan.</i> A cyber security plan in accordance with the criteria set forth in § 73.110 of this chapter.</p>	<p>From § 53.830 and Part 73</p>
<p>(s) <i>Security, safeguards and cyber security plan implementation.</i> A description of the implementation of the security program, safeguards contingency plan, security training and qualification plan, and cyber security plan. Each applicant who prepares a physical security program, a safeguards contingency plan, a security training and qualification plan, or a cyber security plan, shall protect the plans and other related Safeguards Information against unauthorized disclosure in accordance with the requirements of §§ 73.21 and 73.22 of this chapter.</p>	<p>From § 53.860</p>
<p>(t) <i>Fire protection program.</i> A fire protection program description that meets the requirements of § 53.860.</p>	<p>From § 53.870</p>
<p>(u) <i>Inservice inspection/inservice testing program.</i> An inservice inspection/inservice testing program description that meets the requirements of § 53.870.</p>	<p>From § 53.880</p>
<p>(v) <i>Criticality safety program.</i> A criticality safety program description that meets the requirements of § 53.880.</p>	<p>From § 53.890</p>

¹ A physical security plan that contains all the information required in both 10 CFR 73.55 or 10 CFR 73.100 and appendix C to 10 CFR part 73 satisfies the requirement for a contingency plan.

<p>(w) <i>Facility safety program</i>. A facility safety program plan that meets the requirements of § 53.894.</p> <p>(x) <i>General employee training</i>. A description of the training program required to meet § 53.781 and its implementation.</p> <p>(y) <i>Fitness-for-duty program</i>. A description of the fitness-for-duty program required by 10 CFR part 26 and its implementation.</p> <p>(z) A description and evaluation of the results of the applicant's programs, including research and development, if any, to demonstrate that any safety questions identified at the construction permit stage have been resolved.</p> <p>(aa) A description of how the performance of each safety design feature has been demonstrated capable of fulfilling functional design criteria considering interdependent effects through either analysis, appropriate test programs, prototype testing, operating experience, or a combination thereof, in accordance with § 53.440(d).</p>	<p>From §§ 53.781 and 50.120</p> <p>From § 52.79(a)(44) and Part 26</p> <p>From §§ 50.34(a)(8) and 50.43(e)</p>
<p>§ 53.1276 Contents of applications for operating licenses; other application content.</p> <p>(a) In addition to the FSAR, the application must also include the following:</p> <p>(1) <i>Environmental report</i>. An environmental report in accordance with 10 CFR 51.50(c).</p> <p>(2) <i>Technical specifications</i>. Proposed technical specifications prepared in accordance with the requirements of § 53.720(a).</p> <p>(3) <i>Availability controls (if not included in the FSAR)</i>. A description of the controls on plant operations, including availability controls, to provide reasonable assurance of safe operation and that the configurations and special treatments for NSRSS SSCs provide the capabilities and reliabilities required to satisfy the second-tier safety criteria of § 53.220(b), if not addressed by Technical Specifications per (a)(2) above.</p>	<p>From § 51.50</p> <p>From § 53.720(a)</p> <p>From § 53.720(b)</p>
<p>§ 53.1277 Standards for review of applications</p> <p>Applications filed under this subpart will be reviewed according to the standards set out in 10 CFR parts 20, 26, 51, 53, [54], 73, and 140. Upon receipt of an application, the NRC will:</p>	<p>From § 52.81 - A decision has not been made as to whether a future section will be added to Part 53 to address license renewal or whether Part 54 will be amended to address Part 53 licensees.</p>

<p>(a) Give notice in writing to the regulatory agency or State as may have jurisdiction over the rates and services incident to the proposed activity;</p> <p>(b) Publish notice of the application in trade or news publications as appropriate to give reasonable notice to municipalities, private utilities, public bodies and cooperatives which might have a potential interest in the facility;</p> <p>(c) Publish notice of the application once each week for 4 consecutive weeks in the <i>Federal Register</i>.</p>	<p>From § 50.43(a)(1) From § 50.43(a)(2)</p> <p>From § 50.43(a)(3)</p>
<p>§ 53.1277.1 Administrative review of applications; hearings</p> <p>A proceeding on an operating license is subject to all applicable procedural requirements contained in 10 CFR part 2, including the requirements for docketing (§ 2.101 of this chapter) and issuance of a notice of hearing (§ 2.104 of this chapter). All hearings on operating licenses are governed by the procedures contained in 10 CFR part 2.</p>	<p>From § 52.85</p>
<p>§ 53.1277.2 Referral to the Advisory Committee on Reactor Safeguards (ACRS)</p> <p>The Commission shall refer a copy of the application to the ACRS. The ACRS shall report on those portions of the application that concern safety and shall apply the standards referenced in § 53.1277, in accordance with the finality provisions in § 53.1278.1.</p>	<p>From §§ 50.58 and 52.87</p>
<p>§ 53.1277.3 Exemptions, departures, and variances</p> <p>(a) Applicants for an operating license under this subpart, or any amendment to an operating license, may include in the application a request for an exemption from one or more of the Commission's regulations. The Commission may grant an exemption request if it determines that the exemption complies with § 53.080.</p> <p>(b) An applicant for an operating license who has filed an application referencing a NRC approval, permit, license, or certification issued under this part may include in the application a request for departures, variances, or exemptions related to the subject referenced NRC approval, permit, license, or certification. In determining whether to grant the departure, variance, or exemption, the Commission shall apply the same technically relevant criteria as</p>	<p>From § 52.93</p> <p>From §§ 52.39(d) and 52.93</p>

<p>were applicable to the application for the original or renewed approval, license, or certification.</p>	
<p>§ 53.1278 Issuance of operating licenses</p> <p>(a)(1) After receiving the report submitted by the ACRS, the Commission may issue an operating license if the Commission finds that:</p> <p>(i) The applicable standards and requirements of the Act and the Commission's regulations have been met;</p> <p>(ii) Any required notifications to other agencies or bodies have been duly made;</p> <p>(iii) There is reasonable assurance that the facility has been constructed in conformity with its construction permit and will be operated in conformance with its operating license, the provisions of the Act, and the Commission's regulations;</p> <p>(iv) The applicant is technically and financially qualified to engage in the activities authorized;</p> <p>(v) Issuance of the license will not be inimical to the common defense and security or to the health and safety of the public;</p> <p>(vi) The applicable provisions of Part 140 of this chapter have been satisfied; and</p> <p>(vii) The findings required by subpart A of part 51 of this chapter have been made.</p> <p>(2) The Commission may also find, at the time it issues the operating license, that certain acceptance criteria in one or more of the post-construction inspections, tests, analyses verifications in a referenced early site permit have been met. This finding will finally resolve that those acceptance criteria have been met, those acceptance criteria will be deemed to be excluded from the operating license, and findings under § 53.1277.1 with respect to those acceptance criteria are unnecessary.</p> <p>(b) Fuel loading or the installation of a fueled manufactured reactor module may not begin until the operating license is issued.</p> <p>(c) The operating license may include appropriate provisions with respect to any uncompleted items of construction and such limitations or conditions as are required to assure that operation</p>	<p>From § 52.97(a)(1)</p> <p>From §§ 50.50 and 52.97(a)(1)(i)</p> <p>From § 52.97(a)(1)(ii)</p> <p>From §§ 50.57(a)(3) and 52.97(a)(1)(iii)</p> <p>From §§ 50.57(a)(4) and 52.97(a)(1)(iv)</p> <p>From §§ 50.57(a)(6) and 52.97(a)(1)(v)</p> <p>From § 50.57(a)(5)</p> <p>From §§ 50.57 and 52.97(a)(1)(vi)</p> <p>From §§ 50.57(a)(1) and 52.97(a)(2)</p> <p>From § 52.103(g)</p> <p>From § 50.57(b)</p>

<p>during the period of the completion of such items will not endanger public health and safety.</p> <p>(d) An operating license may contain other terms and conditions, including technical specifications, as the Commission deems necessary and appropriate.</p>	<p>From §§ 50.36(b) and 52.97(c)</p>
<p>§ 53.1278.1 Finality of operating licenses</p> <p>After issuance of an operating license, the Commission may not modify, add, or delete any term or condition of the operating license, the design of the facility, except in accordance with the provisions of § 53.1278.1(c) of this part.</p>	<p>From § 52.98(a)</p>
<p>§ 53.1278.2 Operation under an operating license</p> <p>The license shall be subject to revocation, suspension, modification or amendment for cause as provided in the Atomic Energy Act, as amended (Act), and regulations, in accordance with the Act and regulations.</p>	<p>From § 50.54(e]</p>
<p>§ 53.1278.3 Duration of operating license</p> <p>An operating license is issued for a specified period not to exceed 40 years from the date of issuance. Where the operation of a commercial nuclear plant is involved, the Commission will issue the license for the term requested by the applicant or for the estimated useful life of the facility if the Commission determines that the estimated useful life is less than the term requested.</p>	<p>From § 50.51</p>
<p>§ 53.1278.4 Transfer of an operating license</p> <p>An operating license may be transferred in accordance with § 53.1340 of this part</p>	<p>From § 52.105</p>
<p>§ 53.1278.5 Application for renewal</p> <p>The filing of an application for a renewed license must be in accordance with § 53.1390.</p>	<p>From § 52.107</p>
<p>§ 53.1278.6 Continuation of an operating license</p> <p>Each operating license for a facility that has permanently ceased operations, continues in effect beyond the expiration date to authorize ownership and possession of the production or utilization facility, until the Commission notifies the licensee in writing that the license is terminated. During this period of continued effectiveness, the licensee shall:</p>	<p>From § 52.109</p>

<p>(a) Take actions necessary to decommission and decontaminate the facility and continue to maintain the facility, including, where applicable, the storage, control and maintenance of the spent fuel, in a safe condition; and</p> <p>(b) Conduct activities in accordance with all other restrictions applicable to the facility in accordance with the NRC's regulations and the provisions of the operating license for the facility.</p>	<p>From § 52.109(1)</p> <p>From § 52.109(2)</p>
<p>§ 53.1280 Combined licenses Sections 53.1280 through 53.1310 set out the requirements and procedures applicable to Commission issuance of combined licenses for commercial nuclear plants licensed under this part.</p>	<p>From § 52.71</p>
<p>§ 53.1287 Contents of applications for combined licenses; general information. An application for a combined license must supplement the information required by § 53.1130 with the following information:</p> <p>(a) Except for an electric utility applicant, information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought. As applicable, the following should be provided:</p> <p>(1) The applicant must submit information that demonstrates that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs and related fuel cycle costs. The applicant must submit estimates of the total construction costs of the facility and related fuel cycle costs and must indicate the source(s) of funds to cover these costs.</p> <p>(2) The applicant must submit information that demonstrates the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license. The applicant must submit estimates for total annual operating costs for each of the first five years of operation of the facility. The applicant must also indicate the source(s) of funds to cover these costs. [An applicant seeking to renew or extend the term of an operating license for a power reactor need not submit the financial information that is required in an application for an initial license.]</p>	<p>From § 52.77, which references § 50.33. Most of the provisions from § 50.33 are captured in § 53.1130.</p> <p>Bracketed text in paragraph (a)(2) to be moved in Renewal section in Subpart I at a later date.</p>

<p>(3) Each application for a combined license submitted by a newly-formed entity organized for the primary purpose of constructing and operating a facility must also include information showing:</p> <ul style="list-style-type: none"> (i) The legal and financial relationships it has or proposes to have with its stockholders or owners; (ii) The stockholders' or owners' financial ability to meet any contractual obligation to the entity which they have incurred or proposed to incur; and (iii) Any other information considered necessary by the Commission to enable it to determine the applicant's financial qualification. <p>(4) The Commission may request an established entity or newly-formed entity to submit additional or more detailed information respecting its financial arrangements and status of funds if the Commission considers this information appropriate. This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility.</p> <p>(b) Information in the form of a report, as described in Subpart G of this part, indicating how reasonable assurance will be provided that funds will be available to decommission the facility.</p>	
<p>§ 53.1289 Contents of applications for combined licenses; technical information in final safety analysis report</p> <p>(a) The application must contain a final safety analysis report (FSAR) that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components of the facility as a whole. The Commission will require, before issuance of a combined license, that information supporting required siting, design and analysis application content be completed and available for audit if the information is necessary for the Commission to make its safety determination. The final safety analysis report must include the following information, at a level of detail sufficient to enable the Commission to reach a final conclusion on all safety matters that</p>	<p>From § 52.79, as modified to reflect a Part 53 safety case.</p> <p>Revised to reference ESPs and DCs as baseline for content of application.</p>

must be resolved by the Commission before issuance of a combined license:

(1) *Design information.* An application for a combined license for a commercial nuclear reactor must include the design information equivalent to that required for a standard design certification as defined in §§ 53.1235(a)(2)-(19).

(2) *Site information.* An application for a combined license for a commercial nuclear reactor must include the site information equivalent to that required for an early site permit in §§ 53.1185(a)(1)(iv)-(viii).

(3) *Technical qualifications.* A description of the technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter.

(4) *Integrity assessment program.* A description of an Integrity Assessment Program that addresses the elements described in § 53.850.

(5) *Safeguards information.* A description of the program to protect Safeguards Information against unauthorized disclosure in accordance with the requirements in §§ 73.21 and 73.22 of this chapter, as applicable.

(6) *Emergency response facility or facilities.* Description of the locations and capabilities to be established for command and control, support, and coordination of onsite and offsite, as applicable, functions during reactor accident conditions.

(7) *Operator training program.* reserved pending development of Subpart F

(8) *Operator requalification program.* reserved pending development of Subpart F

(9) *Emergency plan.* Emergency plans complying with the requirements of § 53.820 of this part.

(i) Include, as applicable, all emergency plan certifications that have been obtained from the State, local and participating Tribal governmental agencies with emergency planning responsibilities must state that:

(A) The proposed emergency plans are practicable;

(B) These agencies are committed to participating in any further development of the plans, including any required field demonstrations; and

(C) These agencies are committed to executing their responsibilities under the plans in the event of an emergency.

(ii) If certifications cannot be obtained after sustained, good faith efforts by the applicant, then the application must contain information, including a utility plan, sufficient to show that the proposed plans provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the site.

(10) *Organization*. A description of the applicant's organizational structure, allocations or responsibilities and authorities, and personnel qualifications requirements for operation.

(11) *Maintenance program*. A description of a maintenance program that meets the requirements in § 53.730.

(12) *Quality assurance*. A design control and quality assurance program description that meets the requirements of §§ 53.740 and 53.840.

(13) *Radiation protection program*. A radiation protection program description that meets the requirements of § 53.810.

(14) *Security program*. A physical security plan that describes how the applicant will meet the requirements of § 53.830 of this part (and 10 CFR part 11, if applicable, including the identification and description of jobs as required by § 11.11(a) of this chapter, at the proposed facility). The plan must list tests, inspections, audits, and other means to be used to demonstrate compliance with the requirements of 10 CFR parts 11 and 73, if applicable.

(15) *Safeguards contingency plan*. A safeguards contingency plan in accordance with the criteria set forth in appendix C to 10 CFR part 73. The safeguards contingency plan must include plans for dealing with threats, thefts, and radiological sabotage, as defined in part 73 of this chapter, relating to the special nuclear material and nuclear facilities licensed under this chapter and in the applicant's possession and control. Each application for this type of license must include the information contained in the applicant's safeguards

contingency plan.² (Implementing procedures required for this plan need not be submitted for approval.)

(16) *Security training and qualification.* A training and qualification plan that describes how the applicant will meet the criteria set forth in 10 CFR 73.100 or appendix B to 10 CFR part 73.

(17) *Cyber security plan.* A cyber security plan in accordance with the criteria set forth in 10 CR 73.110.

(18) *Security plan implementation.* A description of the implementation of the safeguards contingency plan, training and qualification plan, and cyber security plan. Each applicant who prepares a physical security plan, a safeguards contingency plan, a training and qualification plan, or a cyber security plan, must protect the plans and other related Safeguards Information against unauthorized disclosure in accordance with the requirements of 10 CFR 73.21 and 10 CFR 73.22.

(19) *Fire protection program.* A fire protection program description that meets the requirements of § 53.860.

(20) *Inservice inspection/inservice testing program.* An inservice inspection/inservice testing program description that meets the requirements of § 53.870.

(21) *Criticality safety program.* A criticality safety program description that meets the requirements of § 53.880.

(22) *Facility safety program.* A facility safety program plan that meets the requirements of § 53.894.

(23) *General employee training.* A description of the training program required to meet § 53.781 and its implementation.

(24) *Fitness-for-duty program.* A description of the fitness-for-duty program required by 10 CFR part 26 and its implementation.

(b) If there are SSCs of the plant for which research and development is necessary to confirm the adequacy of their design, a report which documents the resolution of any safety questions associated with such SSCs.

(c) A description of how the performance of each safety design feature has been demonstrated capable of fulfilling functional

² A physical security plan that contains all the information required in both 10 CFR 73.55 or 10 CFR 73.100 and appendix C to 10 CFR part 73 satisfies the requirement for a contingency plan.

design criteria considering interdependent effects through either analysis, appropriate test programs, prototype testing, operating experience, or a combination thereof, in accordance with § 53.440(d).

(d) If the combined license application references an early site permit, then the following requirements apply:

(1) The FSAR need not contain information or analyses submitted to the Commission in connection with the early site permit provided that the FSAR either include or incorporate by reference the early site permit site safety analysis report and contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the design of the facility falls within the site characteristics and design parameters specified in the early site permit.

(2) If the FSAR does not demonstrate that design of the facility falls within the site characteristics and design parameters, the application must include a request for a variance that complies with the requirements of §§ 53.1199(d) and 53.1300.

(3) The FSAR must demonstrate that all terms and conditions that have been included in the early site permit will be satisfied by the date of issuance of the combined license. Any terms or conditions of the early site permit that could not be met by the time of issuance of the combined license, must be set forth as terms or conditions of the combined license.

(4) If the early site permit approves complete and integrated emergency plans, or major features of emergency plans, then the FSAR must include any new or additional information that updates and corrects the information that was provided under § 53.1185(b)(2), and discuss whether the new or additional information materially changes the bases for compliance with the applicable requirements. The application must identify changes to the emergency plans or major features of emergency plans that have been incorporated into the proposed facility emergency plans and that constitute or would constitute a change in an emergency plan that results in reducing the licensee's capability to perform an

Staff is considering how to incorporate similar concept in CP and OL sections, either repeating or including generically upfront (e.g., § 53.1162, Relationship between sections).

emergency planning function in the event of a radiological emergency.

(5) If complete and integrated emergency plans are approved as part of the early site permit, new certifications meeting the requirements of paragraph (14)(i) of this section are not required.

(e) If the combined license application references a standard design approval, then the following requirements apply:

(1) The FSAR need not contain information or analyses submitted to the Commission in connection with the design approval, provided, however, that the FSAR must either include or incorporate by reference the standard design approval FSAR and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the characteristics of the site fall within the site parameters specified in the design approval. In addition, the plant-specific PRA information must use the PRA information for the design approval and must be updated to account for site specific design information and any design changes or departures.

(2) The FSAR must demonstrate that all terms and conditions that have been included in the design approval will be satisfied by the date of issuance of the combined license.

(f) If the combined license application references a standard design certification, then the following requirements apply:

(1) The FSAR need not contain information or analyses submitted to the Commission in connection with the standard design certification, provided, however, that the FSAR must either include or incorporate by reference the standard design certification FSAR and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the site characteristics fall within the site parameters specified in the standard design certification. In addition, the plant specific PRA information must use the PRA information for the standard design certification and must be updated to account for site-specific design information and any design changes or departures.

Staff is considering how to incorporate similar concept in CP and OL sections, either repeating or including generically upfront.

(2) The FSAR must demonstrate that the interface requirements established for the design under § 53.1225(a)(21) have been met.

(3) The FSAR must demonstrate that all requirements and restrictions set forth in the referenced standard design certification rule must be satisfied by the date of issuance of the combined license. Any requirements and restrictions set forth in the referenced standard design certification rule that could not be satisfied by the time of issuance of the combined license, must be set forth as terms or conditions of the combined license.

(g) If the combined license application references the use of one or more manufactured nuclear power reactors licensed under § 53.1240 of this part, then the following requirements apply:

(1) The FSAR need not contain information or analyses submitted to the Commission in connection with the manufacturing license, provided, however, that the FSAR must either include or incorporate by reference the manufacturing license FSAR and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the site characteristics fall within the site parameters specified in the manufacturing license. In addition, the plant-specific PRA information must use the PRA information for the manufactured reactor and must be updated to account for site-specific design information and any design changes or departures.

(2) The FSAR must demonstrate that the interface requirements established for the design have been met.

(3) The FSAR must demonstrate that all terms and conditions that have been included in the manufacturing license will be satisfied by the date of issuance of the combined license. Any terms or conditions of the manufacturing license that could not be met by the time of issuance of the combined license, must be set forth as terms or conditions of the combined license.

(h) Each applicant for a combined license under this part must protect Safeguards Information against unauthorized disclosure in accordance with the requirements in §§ 73.21 and 73.22 of this chapter, as applicable.

§ 53.1290 Contents of applications for combined licenses; other application content.

(a) In addition to the FSAR, the application must also include the following:

(1) *Environmental report.* (i) An environmental report either in accordance with 10 CFR 51.50(c) if a limited work authorization under in § 53.1170 is not requested in conjunction with the combined license application, or in accordance with §§ 51.49 and 51.50(c) of this chapter if a limited work authorization is requested in conjunction with the combined license application.

(ii) If the applicant wishes to request that a limited work authorization under § 53.1170 be issued before issuance of the combined license, the application must include the information otherwise required by § 53.1170, in accordance with either 10 CFR 2.101(a)(1) through (a)(4), or 10 CFR 2.101(a)(9).

(2) *Technical specifications.* Proposed technical specifications prepared in accordance with the requirements of § 53.720(a).

(3) *Availability controls (if not included in the FSAR).* A description of the controls on plant operations, including availability controls, to provide reasonable assurance of safe operation and that the configurations and special treatments for NSRSS SSCs provide the capabilities and reliabilities required to satisfy the second-tier safety criteria of § 53.220(b) if not addressed by Technical Specifications per (b)(2) above.

(4) *ITAAC.* The proposed inspections, tests, and analyses, including those applicable to emergency planning, that the licensee shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and will be operated in conformity with the combined license, the provisions of the Act, and the Commission's rules and regulations.

(i) If the application references an early site permit with ITAAC, the early site permit ITAAC must apply to those aspects of the combined license which are approved in the early site permit.

From § 52.80

<p>(ii) If the application references a standard design certification, the ITAAC contained in the certified design must apply to those portions of the facility design which are approved in the standard design certification.</p> <p>(iii) If the application references an early site permit with ITAAC or a standard design certification or both, the application may include a notification that a required inspection, test, or analysis in the ITAAC has been successfully completed and that the corresponding acceptance criterion has been met. The <i>Federal Register</i> notification required by § 52.85 must indicate that the application includes this notification.</p>	
<p>§ 53.1292 Standards for review of applications</p> <p>Applications filed under this subpart will be reviewed according to the standards set out in 10 CFR parts 20, 51, 53, [54], 73, and 140.</p>	<p>A decision has not been made as to whether a future section will be added to Part 53 to address license renewal or whether Part 54 will be amended to address Part 53 licensees.</p>
<p>§ 53.1294 Finality of referenced NRC approvals</p> <p>If the application for a combined license under this part references an early site permit, standard design certification rule, standard design approval, or manufacturing license, the scope and nature of matters resolved for the application and any combined license issued are governed by the relevant provisions addressing finality, including §§ 53.1199, 53.1239, 53.1229, and 53.1248.</p>	
<p>§ 53.1295 Administrative review of applications; hearings</p> <p>A proceeding on a combined license is subject to all applicable procedural requirements contained in 10 CFR part 2, including the requirements for docketing (10 CFR 2.101) and issuance of a notice of hearing (10 CFR 2.104). If an applicant requests a Commission finding on certain ITAAC with the issuance of the combined license, then those ITAAC will be identified in the notice of hearing. All hearings on combined licenses are governed by the procedures contained in 10 CFR part 2.</p>	
<p>§ 53.1296 Referral to the Advisory Committee on Reactor Safeguards</p> <p>The Commission shall refer a copy of the application to the Advisory Committee on Reactor Safeguards (ACRS). The ACRS shall report on those portions of the application that concern safety</p>	

<p>and shall apply the standards referenced in § 53.1292, in accordance with the finality provisions in § 53.1294.</p>	
<p>§ 53.1298 Authorization to conduct limited work authorization activities</p> <p>(a) If the application for a combined license under this part does not reference an early site permit which authorizes the holder to perform the activities under § 53.1170(b) [50.10(d)], the applicant may not perform those activities without obtaining the separate authorization required by § 53.1170(a). Authorization may be granted only after the presiding officer in the proceeding on the application has made the findings and determination required by § 53.1170(c)(1)(ii) and (c)(1)(iv), and the Director of the Office of Nuclear Reactor Regulation makes the determination required by § 53.1170(c)(1)(iii).</p> <p>(b) If, after an applicant has performed the activities permitted by paragraph (a) of this section, the application for the combined license is withdrawn or denied, then the applicant must implement the approved site redress plan.</p>	
<p>§ 53.1300 Exemptions and variances</p> <p>(a) Applicants for a combined license under this subpart, or any amendment to a combined license, may include in the application a request for an exemption from one or more of the Commission's regulations.</p> <p>(1) If the request is for an exemption from any part of a referenced standard design certification rule, the Commission may grant the request if it determines that the exemption complies with any exemption provisions of the referenced standard design certification rule, or with § 53.1239 if there are no applicable exemption provisions in the referenced standard design certification rule.</p> <p>(2) For all other requests for exemptions, the Commission may grant a request if it determines that the exemption complies with § 53.080.</p> <p>(b) An applicant for a combined license who has filed an application referencing an early site permit issued under § 53.1190 of this part may include in the application a request for a variance</p>	<p>From § 52.93</p>

<p>from one or more site characteristics, design parameters, or terms and conditions of the permit, or from the site safety analysis report. In determining whether to grant the variance, the Commission shall apply the same technically relevant criteria as were applicable to the application for the original or renewed site permit. Once a combined license referencing an early site permit is issued, variances from the early site permit will be addressed under the provisions of Subpart I.</p> <p>(c) An applicant for a combined license who has filed an application referencing a nuclear power reactor manufactured under a manufacturing license issued under § 53.1240 of this part may include in the application a request for a departure from one or more design characteristics, site parameters, terms and conditions, or approved design of the manufactured reactor. The Commission may grant a request only if it determines that the departure will comply with the requirements of § 53.080, and that the special circumstances outweigh any decrease in safety that may result from the reduction in standardization caused by the departure.</p> <p>(d) Issuance of a variance under paragraph (b) or a departure under paragraph (c) of this section is subject to litigation during the combined license proceeding in the same manner as other issues material to that proceeding.</p>	
<p>§ 53.1302 Issuance of combined licenses</p> <p>(a)(1) After conducting a hearing in accordance with § 53.1295 and receiving the report submitted by the ACRS, the Commission may issue a combined license if the Commission finds that:</p> <ul style="list-style-type: none"> (i) The applicable standards and requirements of the Act and the Commission's regulations have been met; (ii) Any required notifications to other agencies or bodies have been duly made; (iii) There is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of the Act, and the Commission's regulations; (iv) The applicant is technically and financially qualified to engage in the activities authorized; 	<p>From § 52.97</p>

<p>(v) Issuance of the license will not be inimical to the common defense and security or to the health and safety of the public; and</p> <p>(vi) The findings required by subpart A of part 51 of this chapter have been made.</p> <p>(2) The Commission may also find, at the time it issues the combined license, that certain acceptance criteria in one or more of the ITAAC in a referenced early site permit or standard design certification have been met. This finding will finally resolve that those acceptance criteria have been met, those acceptance criteria will be deemed to be excluded from the combined license, and findings under § 53.1307(g) with respect to those acceptance criteria are unnecessary.</p> <p>(b) The Commission shall identify within the combined license the inspections, tests, and analyses, including those applicable to emergency planning, that the licensee must perform, and the acceptance criteria that, if met, are necessary and sufficient to provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Act, and the Commission's rules and regulations.</p> <p>(c) A combined license must contain the terms and conditions, including technical specifications, as the Commission deems necessary and appropriate.</p>	
<p>§ 53.1304 Finality of combined licenses</p> <p>(a) After issuance of a combined license, the Commission may not modify, add, or delete any term or condition of the combined license, the design of the facility, the inspections, tests, analyses, and acceptance criteria contained in the license which are not derived from a referenced standard design certification or manufacturing license, except in accordance with the provisions of §§ 53.1307 or 53.1380.</p> <p>(b) If the combined license does not reference a standard design certification or a reactor manufactured under § 53.1240 of this part, then a licensee may make changes in the facility as described in the FSAR (as updated), make changes in the procedures as described in the FSAR (as updated), and conduct</p>	<p>From § 52.98</p> <p>Paragraphs (b), (c)(2) and (d)(2) may need to be updated if all applicable change processes are not captured in Subpart I.</p>

tests or experiments not described in the FSAR (as updated) under the applicable change processes in Subpart I of this part.

(c) If the combined license references a certified design, then—

(1) Changes to or departures from information within the scope of the referenced standard design certification rule are subject to the applicable change processes in that rule; and

(2) Changes that are not within the scope of the referenced standard design certification rule are subject to the applicable change processes in Subpart I of this part, unless they also involve changes to or noncompliance with information within the scope of the referenced standard design certification rule. In these cases, the applicable provisions of this section and the standard design certification rule apply.

(d) If the combined license references a reactor manufactured under § 53.1240, then—

(1) Changes to or departures from information within the scope of the manufactured reactor's design are subject to the change processes in § 53.1248; and

(2) Changes that are not within the scope of the manufactured reactor's design are subject to the applicable change processes in Subpart I.

(e) The Commission may issue and make immediately effective any amendment to a combined license upon a determination by the Commission that the amendment involves no significant hazards consideration, notwithstanding the pendency before the Commission of a request for a hearing from any person. The amendment may be issued and made immediately effective in advance of the holding and completion of any required hearing. The amendment will be processed in accordance with the procedures specified in § 53.1312.

(f) Any modification to, addition to, or deletion from the terms and conditions of a combined license, including any modification to, addition to, or deletion from the inspections, tests, and analyses, or related acceptance criteria contained in the license is a proposed

<p>amendment to the license. There must be an opportunity for a hearing on the amendment.</p>	
<p>§ 53.1305 Construction activities A combined license holder must meet the requirements in § 53.610 prior to beginning construction activities. The licensee holder must notify the NRC at least 30 days prior to the beginning of construction that all requirements described in § 53.610 have been addressed.</p>	
<p>§ 53.1306 Inspection during construction (a) <i>Licensee schedule for inspections, tests, or analyses.</i> The licensee must submit to the NRC, no later than 1 year after issuance of the combined license or at the start of construction as defined at § 53.020, whichever is later, its schedule for completing the inspections, tests, or analyses in the ITAAC. The licensee must submit updates to the ITAAC schedules every 6 months thereafter and, within 1 year of its scheduled date for initial loading of fuel, the licensee must submit updates to the ITAAC schedule every 30 days until the final notification is provided to the NRC under paragraph (c)(1) of this section. (b) <i>Licensee and applicant conduct of activities subject to ITAAC.</i> With respect to activities subject to an ITAAC, an applicant for a combined license may proceed at its own risk with design and procurement activities, and a licensee may proceed at its own risk with design, procurement, construction, and preoperational activities, even though the NRC may not have found that any one of the prescribed acceptance criteria are met. (c) <i>Licensee notifications – (1) ITAAC closure notification.</i> The licensee must notify the NRC that prescribed inspections, tests, and analyses have been performed and that the prescribed acceptance criteria are met. The notification must contain sufficient information to demonstrate that the ITAAC activities have been performed and that the prescribed acceptance criteria are met. (2) <i>ITAAC post-closure notifications.</i> Following the licensee’s ITAAC closure notifications under paragraph (c)(1) of this section until the Commission makes the finding under 53.1307(g), the licensee must notify the NRC, in a timely manner, of new</p>	<p>From § 52.99</p>

information that materially alters the basis for determining that either inspections, tests, and analyses were performed as required, or that acceptance criteria are met. The notification must contain sufficient information to demonstrate that, notwithstanding the new information, the prescribed inspections, tests, and analyses have been performed as required, and the prescribed acceptance criteria are met.

(3) *Uncompleted ITAAC notification.* If the licensee has not provided, by the date 225 days before the scheduled date for initial loading of fuel, the notification required by paragraph (c)(1) of this section for all ITAAC, then the licensee must notify the NRC that the prescribed inspections, tests, and analyses for all uncompleted ITAAC will be performed and that the prescribed acceptance criteria will be met prior to operation. The notification must be provided no later than the date 225 days before the scheduled date for initial loading of fuel, and must provide sufficient information to demonstrate that the prescribed inspections, tests, and analyses will be performed and the prescribed acceptance criteria for the uncompleted ITAAC will be met, including, but not limited to, a description of the specific procedures and analytical methods to be used for performing the prescribed inspections, tests, and analyses and determining that the prescribed acceptance criteria are met.

(4) *All ITAAC complete notification.* The licensee must notify the NRC that all ITAAC activities are complete.

(d) *Licensee determination of noncompliance with ITAAC.* (1) In the event that an activity is subject to a ITAAC derived from a referenced standard design certification and the licensee has not demonstrated that the prescribed acceptance criteria are met, the licensee may take corrective actions to successfully complete that ITAAC or request an exemption from the standard design certification ITAAC, as applicable. A request for an exemption must also be accompanied by a request for a license amendment under Subpart I of this part.

(2) In the event that an activity is subject to an ITAAC not derived from a referenced standard design certification and the licensee has not demonstrated that the prescribed acceptance

<p>criteria are met, the licensee may take corrective actions to successfully complete that ITAAC or request a license amendment under Subpart I of this part.</p> <p>(e) <i>NRC inspection, publication of notices, and availability of licensee notifications.</i> The NRC ensure that the prescribed inspections, tests, and analyses in the ITAAC are performed.</p> <p>(1) At appropriate intervals until the last date for submission of requests for hearing under 53.1307(g), the NRC shall publish notices in the <i>Federal Register</i> of the NRC staff's determination of the successful completion of inspections, tests, and analyses.</p> <p>(2) The NRC shall make publicly available the licensee notifications under paragraph (c) of this section. The NRC shall, no later than the date of publication of the notice of intended operation required by 53.1307(a), make publicly available those licensee notifications under paragraph (c) of this section that have been submitted to the NRC at least seven (7) days before that notice.</p>	
<p>§ 53.1307 Operation under a combined license</p> <p>(a) The licensee must notify the NRC of its scheduled date for initial loading of fuel no later than 270 days before the scheduled date and must notify the NRC of updates to its schedule every 30 days thereafter. Not less than 180 days before the date scheduled for initial loading of fuel into a plant by a licensee that has been issued a combined license under this part, the Commission shall publish notice of intended operation in the <i>Federal Register</i>. The notice must provide that any person whose interest may be affected by operation of the plant may, within 60 days, request that the Commission hold a hearing on whether the facility as constructed complies, or on completion will comply, with the acceptance criteria in the combined license, except that a hearing shall not be granted for those ITAAC which the Commission found were met under § 53.1302(a)(2).</p> <p>(b) A request for hearing under paragraph (a) of this section must show, <i>prima facie</i>, that—</p> <p>(1) One or more of the acceptance criteria of the ITAAC in the combined license have not been, or will not be, met; and</p>	<p>From § 52.103</p>

(2) The specific operational consequences of nonconformance that would be contrary to providing reasonable assurance of adequate protection of the public health and safety.

(c) The Commission, acting as the presiding officer, shall determine whether to grant or deny the request for hearing in accordance with the applicable requirements of 10 CFR 2.309. If the Commission grants the request, the Commission, acting as the presiding officer, shall determine whether during a period of interim operation there will be reasonable assurance of adequate protection to the public health and safety. The Commission's determination must consider the petitioner's *prima facie* showing and any answers thereto. If the Commission determines there is such reasonable assurance, it shall allow operation during an interim period under the combined license.

(d) The Commission, in its discretion, shall determine appropriate hearing procedures, whether informal or formal adjudicatory, for any hearing under paragraph (a) of this section, and shall state its reasons therefore.

(e) The Commission shall, to the maximum possible extent, render a decision on issues raised by the hearing request within 180 days of the publication of the notice provided by paragraph (a) of this section or by the anticipated date for initial loading of fuel into the reactor, whichever is later.

(f) A petition to modify the terms and conditions of the combined license will be processed as a request for action in accordance with 10 CFR 2.206. The petitioner shall file the petition with the Secretary of the Commission. Before the licensed activity allegedly affected by the petition (fuel loading, low power testing, etc.) commences, the Commission shall determine whether any immediate action is required. If the petition is granted, then an appropriate order will be issued. Fuel loading and operation under the combined license will not be affected by the granting of the petition unless the order is made immediately effective.

(g) The licensee must not operate the facility until the Commission makes a finding that the acceptance criteria in the combined license are met, except for those acceptance criteria that

<p>the Commission found were met under § 53.1302(a)(2). If the combined license is for a modular design, each reactor module may require a separate finding as construction proceeds.</p> <p>(h) After the Commission has made the finding in paragraph (g) of this section, the ITAAC, by virtue of their inclusion in the combined license, constitute regulatory requirements either for licensees or for renewal of the license; except for the specific ITAAC for which the Commission has granted a hearing under paragraph (a) of this section, all ITAAC expire upon final Commission action in the proceeding. However, subsequent changes to the facility or procedures described in the FSAR (as updated) must comply with the requirements in §§ 53.1304(e) or (f), as applicable.</p>	
<p>§ 53.1308 Duration of combined license</p> <p>A combined license is issued for a specified period not to exceed 40 years from the date on which the Commission makes a finding that acceptance criteria are met under § 53.1307(g) or allowing operation during an interim period under the combined license under § 53.1307(c).</p>	From § 52.104
<p>§ 53.1309 Application for renewal</p> <p>The filing of an application for a renewed license must be in accordance with § 53.1390.</p>	
<p>§ 53.1310 Continuation of combined license</p> <p>Each combined license for a facility that has permanently ceased operations, continues in effect beyond the expiration date to authorize ownership and possession of the production or utilization facility, until the Commission notifies the licensee in writing that the license is terminated. During this period of continued effectiveness, the licensee must—</p> <p>(a) Take actions necessary to decommission and decontaminate the facility and continue to maintain the facility, including, where applicable, the storage, control and maintenance of the spent fuel, in a safe condition; and</p> <p>(b) Conduct activities in accordance with all other restrictions applicable to the facility in accordance with the NRC's regulations and the provisions of the combined license for the facility.</p>	

§ 53.1400 Standardization of nuclear power plant designs: licenses to construct and operate nuclear power reactors of identical design at multiple sites

The Commission's regulations in 10 CFR part 2 specifically provide for the holding of hearings on particular issues separately from other issues involved in hearings in licensing proceedings, and for the consolidation of adjudicatory proceedings and of the presentations of parties in adjudicatory proceedings such as licensing proceedings (10 CFR 2.316 and 2.317). This section sets out the particular requirements and provisions applicable to situations in which applications for construction permits and subsequent operating licenses, or combined licenses, under this part are filed by one or more applicants for licenses to construct and operate nuclear power reactors of identical design ("common design") to be located at multiple sites.³

(a) Except as otherwise specified in this section or as the context otherwise indicates, the provisions of this subpart apply to construction permit, operating license, and combined license applications under this part subject to this section.

(b) Each application for a construction permit, operating license, or combined license submitted pursuant to this section must be submitted as specified in §§ 53.1260, 53.1270, or 53.1280 and 10 CFR 2.101. Each application must state that the applicant wishes to have the application considered under this section and must list each of the applications to be treated together under this section.

(c) Each application must include the information required by the applicable sections of this subpart, *provided however*, that the application must identify the common design, and, if applicable, reference a standard design certification under this part, or the use of a reactor manufactured under this part. The final safety analysis report for each application must either incorporate by reference or include the final safety analysis of the common design, including, if

From Appendix N of Parts 50 and 52.

³ If the design for the power reactor(s) proposed in a particular application is not identical to the others, that application may not be processed under this section and subpart D of part 2 of this chapter.

applicable, the final safety analysis report for the referenced standard design certification or the manufactured reactor.⁴

(d) Each application submitted pursuant to this section must contain an environmental report as required by §§ 53.1266, 53.1276, or, 53.1290, as applicable, and which complies with the applicable provisions of 10 CFR part 51, *provided, however*, that the application may incorporate by reference a single environmental report on the environmental impacts of the common design.

(e) Upon a determination that each application is acceptable for docketing under 10 CFR 2.101, each application will be docketed and a notice of docketing for each application will be published in the *Federal Register*, in accordance with 10 CFR 2.104, *provided, however*, that the notice must state that the application will be processed under the provisions of this section and subpart D of 10 CFR part 2. At the discretion of the Commission, a single notice of docketing for multiple applications may be published in the *Federal Register*.

(f) The NRC shall prepare draft and final environmental impact statements for each of the applications under 10 CFR part 51. Scoping under 10 CFR 51.28 and 51.29 for each of the license applications may be conducted simultaneously and joint scoping may be conducted with respect to the environmental issues relevant to the common design. If the applications reference a standard design certification, then the environmental impact statement for each of the applications must incorporate by reference the standard design certification environmental assessment. If the applications do not reference a standard design certification, then the NRC shall prepare draft and final supplemental environmental impact statements which address severe accident mitigation design alternatives for the common design, which must be incorporated by reference into the environmental impact statement prepared for each application. Scoping under 10 CFR 51.28 and 51.29 for the supplemental environmental impact statement may be conducted

⁴ As used in this section, the design of a nuclear power reactor included in a single referenced safety analysis report means the design of those structures, systems, and components important to radiological health and safety and the common defense and security.

simultaneously and may be part of the scoping for each of the applications.

(g) The ACRS shall report on each of the applications as required by the applicable sections of this part. Each report must be limited to those safety matters for each application which are not relevant to the common design. In addition, the ACRS shall separately report on the safety of the common design, *provided, however*, that the report need not address the safety of a referenced standard design certification or reactor manufactured under this part.

(h) The Commission shall designate a presiding officer to conduct the proceeding with respect to the health and safety, common defense and security, and environmental matters relating to the common design. The hearing will be governed by the applicable provisions of subparts A, C, G, L, N, and O of 10 CFR part 2 relating to applications for construction permits, operating licenses, and combined licenses. The presiding officer shall issue a partial initial decision on the common design.

(i) If the design for the power reactor(s) proposed in a particular application is not identical to the others, that application may not be processed under this section and subpart D of 10 CFR part 2.

(j) As used in this section, the design of a nuclear power reactor included in a single referenced safety analysis report means the design of those structures, systems, and components important to radiological health and safety and the common defense and security.