FINAL SUPPORTING STATEMENT FOR 10 CFR PART 52 LICENSES, CERTIFICATIONS, AND APPROVALS FOR NUCLEAR POWER PLANTS

(3150-0151)

EXTENSION

Description of the Information Collection

In accordance with its mission, the U.S. Nuclear Regulatory Commission (NRC) protects the health and safety of the public and the environment by regulating the design, siting, construction, and operation of new commercial nuclear power facilities. For new reactor facilities, the NRC reviews applications submitted by prospective licensees, and (when appropriate) issues standard design certifications, standard design approvals, early site permits, limited work authorizations, construction permits, operating licenses, and combined licenses.

The licensing processes in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants," provide for issuance of early site permits (ESPs), standard design approvals (SDAs) and certifications, manufacturing licenses (MLs), and combined licensees (COLs), for commercial nuclear power reactors. These licensing procedures are options to the two-step licensing process in 10 CFR Part 50, which provides for a construction permit (CP) and an operating license (OL). Part 52 can reduce the overall paperwork burden borne by applicants for CPs and OLs because Part 52 only requires a single application and provides options for referencing standardized designs. The licensing processes in 10 CFR Part 52 apply to light-water reactors (LWR) and non-light water reactors (NLWR).

The NRC information collection in Part 52 includes applications for ESPs, design certifications (DCs), COLs, SDAs and MLs. The applicants submit updated reports, applications for renewals, exemption requests and maintain records of changes to the facility and records of detailed design related information.

In January 2023, OMB approved the information collections contained in the final rule amending Part 52 to certify the NuScale standard design (88 FR 3287). Applicants or licensees intending to construct and operate a NuScale design may do so by referencing this design certification (DC) rule and need not demonstrate in their applications the safety of the certified design as amended. The information collection burden was captured under temporary clearance 3150-0254. Because the NuScale design certification is contained in 10 CFR Part 52, the burden for this design certification has been added to the current Part 52 renewal. After the approval of this Part 52 renewal, the 3150-0254 clearance number will be discontinued.

Regulatory Guide (RG) 1.206, "Applications for Nuclear Power Plants," provides guidance on the format and content of applications for nuclear power plants submitted to the U.S. Nuclear Regulatory Commission (NRC) under 10 CFR Part 52, which specifies the information to be included in an application. Additional guidance documents are listed at the end of this document in the table entitled, "Guidance Documents for Information Collections Contained in 10 CFR Part 52, Licenses, Certifications, and Approvals for Nuclear Power Plants."

The RG 1.206 also provides guidance on the conduct of pre-application activities.

Pre-application activities encompass all the communications, correspondence, meetings, document submittals/reviews, and other interactions that occur between the NRC staff and a prospective applicant before the tendering of an application under 10 CFR Part 52. The NRC considers pre-application activities to be mutually beneficial to both the staff and prospective applicants and encourages prospective applicants to initiate interactions early in the application planning process. Pre-application activities, although encouraged and recommended by the NRC, are not required and are voluntary by prospective applicants.

Voluntary information collections associated with preapplication activities include:

- Submission of information about schedules, status, plant design, major systems and components, computer codes and models, quality assurance programs, probabilistic risk assessment models, emergency plans, and the status of interactions with other agencies
- Meetings with NRC staff, potentially including public meetings; and
- Topical reports addressing a technical topic related to nuclear plant safety that may apply to multiple applicants or licensees; and
- Technical reports addressing application-specific technical safety topics, generally intended to support and augment information contained in the application; and
- White papers to provide explanatory information to enhance the understanding of the NRC staff; and
- Documentation of the proposed resolution for application-specific safety and environmental issues; and
- Information about the environmental report; and
- A preapplication readiness assessment

This renewal incorporates information collection changes made to 10 CFR Part 52 as part of the Emergency Preparedness (EP) for Small Modular Reactors (SMR) and Other New Technologies (ONT) Final Rule, approved by OMB on October 13, 2023. To allow maximum flexibility while continuing to provide adequate protection of public health and safety and the common defense and security, the NRC made the new EP requirements an alternative to the current requirements. Thus, existing SMR or ONT facilities or future facilities licensed after the effective date of the final rule will use either the new performance-based EP program or the existing deterministic EP requirements in 10 CFR Part 50.

A. Justification

1. Need for and Practical Utility of the Collection of Information

The information in 10 CFR Part 52 is needed by the agency to assess the adequacy and suitability of an applicant's site, plant design, construction, training, and experience, plans and procedures for the protection of public health and safety.

Pursuant to the Atomic Energy Act of 1954 (AEA), as amended, and Title II of the Energy Reorganization Act (ERA) of 1974, the Commission issues licenses for the use of nuclear material in commercial power plants. These licenses are issued in accordance with such conditions as the NRC may, by rule or regulation, establish to effectuate the purposes and provisions of the statutes. Prior to the issuance of Part 52, the regulations provided for a two-step process of licensing in Part 50. Under the Part 50 process, an applicant first applies for a CP, providing only preliminary design information. Then, as construction nears completion and design information becomes final, the applicant applies for an OL. This process, involving two separate applications and two submittals of design information, created additional burden on the agency and on the applicant, requiring two separate hearings.

The regulations in 10 CFR Part 52 can reduce these licensing burdens in principally two ways: first, by providing for the certification by rulemaking of standardized reactor designs, thus making it possible to use the same design information for the licensing of several plants; second, by providing for the issuance of a single license for both operation and construction, thus doing away with the necessity for two applications and two submittals of design information. The principal aim of Part 52 is to enhance safety through the use of standardized designs. Such designs focus the review and allow the industry to more easily transfer experience in maintenance and operation from one plant to another. A secondary objective was to reduce the licensing burdens on both the industry and the agency. Thus, the information collection requirements in Part 52 can reduce the information collection burden borne by the industry.

A complete description of all Part 52 information collection requirements is located at the end of this supporting statement. Each major Part 52 process which requires information collection is discussed. Compared to the previous process, Part 52, as noted above, for the most part does not add to burdens, but reallocates those burdens to earlier stages in the licensing process or reduces them through the use of standardized designs. Additionally, potential applicants can voluntarily engage the NRC in preapplication activities which support the NRC readiness to conduct licensing reviews in a predictable timeframe by identifying major policy, technical, and licensing issues, and developing an understanding of how such issues can be resolved before the NRC receives the application.

2. Agency Use of Information

In general, the information submitted is reviewed by various NRC offices charged with the responsibility of ensuring that licensed activities are conducted in accordance with the AEA, the ERA and the National Environmental Policy Act (NEPA). The information

collected is used to assess the adequacy and suitability of the applicant's site, plant design, construction, training, and experience, and plans and procedures for the protection of public health and safety. The NRC review of such information, and the findings derived from that information, will form the basis for Commission decisions and actions concerning the issuance, modification, or revocation of licenses, certifications, and approvals for nuclear power reactor plants.

3. <u>Reduction of Burden Through Information Technology</u>

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. The NRC has issued <u>Guidance for Electronic Submissions</u> to the NRC which provides direction for the electronic transmission and submittal of documents to the NRC. Electronic transmission and submittal of documents can be accomplished via the following avenues: the Electronic Information Exchange (EIE) process, which is available from the NRC's "Electronic Submittals" Web page, by Optical Storage Media (OSM) (e.g., CD-ROM, DVD), by facsimile or by e-mail. It is estimated that nearly all (100%) of the potential responses are filed electronically.

- <u>Effort to Identify Duplication and Use Similar Information</u> No sources of similar information are available. There is no duplication of requirements.
- 5. Effort to Reduce Small Business Burden

The information collections required by this regulation will not be a burden to small businesses because only large companies have the technical and financial resources to support the large capital investment required to design and construct nuclear power plants (NPPs). Therefore, small businesses will not be seeking the permits, certifications, and licenses made available by this regulation.

6. <u>Consequences to Federal Program or Policy Activities if the Collection is not Conducted</u> <u>or is Conducted Less Frequently</u>

Applications are required only when licensing action is sought. The NRC cannot collect the information any less frequently or it would compromise its ability to make appropriate licensing decisions and would adversely affect the administration of the duties of the Commission to protect public health and safety.

7. <u>Circumstances Which Justify Variation from OMB Guidelines</u>

For the recordkeeping requirement of 10 CFR 52.63(b)(2), which requires a licensee referring a DC to maintain records of all departures from the-design of the nuclear power facility, until the date of termination of the license. The retention period is "until the date of termination of the license. The retention period is "until the date of termination of the license. The retention period is "until the date of termination of the license. The retention period is "until the date of termination of the license" to ensure that the health and safety of the public will not be affected adversely by design changes that could impact the operation of the facility. The 10 CFR Part 52 process provides for a standard design approval, which is subsequently referenced in a final standard design certification rule, and that standard design certification is, in turn, referenced in a COL issued by the NRC. A standard design

approval, even if not certified, can also be referenced in a COL. The NRC imposes longer retention times for records associated with Part 52 licensing because of the potentially longer "regulatory life" of a referenced license, standard design approval or standard design certification. Therefore, those entities providing a certified design or design approval shall retain any notifications sent to purchasers and affected licensees for a minimum of 5 years after the date of the notification and retain a record of the purchasers for 15 years after delivery of the design which is the subject of the design approval or service associated with the design.

8. <u>Consultation Outside the Agency</u>

Opportunity for public comment on the information collection requirements for this clearance package was published In the *Federal Register* on September 7, 2023 (88 FR 61626). Additionally, NRC staff contacted four stakeholders via email. The stakeholders were new reactor owner licensee representatives from General Electric Company, NuScale Power, Oklo Power, LLC, and Westinghouse.

Staff received the following comments from NuScale Power, no additional responses were received because of the FRN or the staff's direct solicitation for comments:

Comment:

The estimate for Subpart E responses (Standard Design Approvals) does not include the 1 LWR SDA application (NuScale US460) currently under review. That SDA review will continue throughout CY2024. Based on the burden in CY2023 to-date, NuScale estimates the CY2024 burden to be 32,000 hours annually.

NRC staff response:

Burden in the current clearance is based on the estimated number of applications anticipated during the upcoming clearance period (February 2024 through January 2027). Applications received before this time are not included in burden estimates for the current submission. Burden for the NuScale SDA was included in the renewal for Part 52 during the last clearance cycle, expiring January 2024. NRC staff uses the best information available to develop estimates of the number of anticipated applications, including information provided by industry in response to "Voluntary Reporting of New Reactor Applications" (3150-0228).

Comment:

This information clearance is intertwined with several others. For example, the draft supporting statement notes that information collection pursuant to 10 CFR 52.77 (COLA general information and 52.80(b) (COLA environmental report) are covered under clearances 3150-0011 and 3150-0021, respectively. This approach obfuscates the information collection associated with a single licensing action, in this example the burden required to seek a COLA and may be inaccurate due to differing renewal cycles. These COLA requirements - especially the environmental report - are a significant portion of a COLA application (and likewise for other Part 52 licensing actions. All aspects of Part 52 applications should be controlled under a single OMB clearance for clarity and accuracy.

Revise the scope of this OMB clearance to cover the complete Part 52 license application by moving the reporting burden for associated requirements from the clearances for those regulations (e.g., 3150-0011 and 3150-0021) over to OMB 3150-0151.

NRC staff response:

This information clearance is intertwined with several others. When multiple rules require the compliance with the requirements in the same rule, it is the NRC's preferred practice to report all the burden for the common requirements in the OMB clearance for the rule containing the requirements. This aligns the burden reporting with rule requirements. For example, 10 CFR 52.77 and 10 CFR Part 50 require applicants to provide all of the information required by in 10 CFR 50.33; therefore, the burden for all the 10 CFR 50.33 information collections (ESPs, COLs, etc) is captured in the 10 CFR Part 50 clearance (3150-0011).

Similarly, 52.80(b) requires compliance with environmental report requirements contained in 51.49 and 51.50(c) - which in turn points to additional requirements contained in 51.45, 51.51, and 51.52. 10 CFR Part 51 is the primary location for the agency's environmental protection regulations. The burden for this requirement is contained in the clearance for Part 51.

The agency's methodology for compliance with the Paperwork Reduction Act, including how to allocate burden when one requirement points to a requirement in another CFR part, is long established and making a conceptual change to the PRA compliance framework would require significant government resources. For example, 10 CFR Part 51, Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions contains environmental report requirements for many different types of licensees, ranging from power reactors, materials licensees, to disposal facilities. Currently, the burden for these reports is included in a single clearance (3150-0021) and separate estimates are provided for each licensee type. This allows for consistent application of the environmental requirements since only one rule is directly impacted. To break these requirements up into separate clearance numbers according to the type of licensing action would require republication of all guidance documents containing the clearance numbers as well as an administrative rulemaking to change the clearance numbers for this CFR Part.

While the NRC staff will not be making any changes to the structure of the 10 CFR Part 52 clearance at this time since to do so would impact other clearances, your comment will be included in the ongoing evaluation of the agency's information collection program.

Comment:

Notably, the current version of 3150-0011 has no estimated COLA applications, so when this approval points to 3150-0011 as covering the collection under 10 CFR 52.77, no responses and no burden are currently allocated.

NRC staff response:

One recognized challenge is that the NRC's information collection clearances tend to cover different time periods. All information collection clearances must be renewed at

least once every three years. Due to the nature of the OMB clearance process, the synchronization of clearance periods is not possible, which is why a respondent (e.g. a COL application) may be included in the 10 CFR Part 52 clearance renewal before it is reflected in the 10 CFR Part 50 clearance. That respondent will be included in the 10 CFR Part 50 clearance renewal when it is submitted later in 2024. As with the 10 CFR Part 52 clearance renewal, the 10 CFR Part 50 renewal will be published for public comment.

Comment:

In NuScale's experience, some of the information the staff requests in SDA and DC applications is beyond the scope of information necessary for assuring public health and safety. The out-of-scope requests could be minimized if the staff considered risk significance prior to requesting additional information.

NRC staff response:

The NRC review process guidelines emphasize using a more risk informed approach to focus the review on those topics that are applicable to the current stage of the review and to ensure public health and safety is maintained. This is an ongoing transformational process as described at https://www.nrc.gov/about-nrc/plans-performance/modern-riskinformed-reg/trans-journey.html. This process is further described in NRC Office Instruction, LIC-206, "Integrated Risk-Informed Decision-Making for Licensing Reviews," Revision 1, June 26, 2020, (Agencywide Documents and Access Management System (ADAMS) Accession No. 19263A645), which provides guidance applicable to considering risk-informed decision-making (RIDM) in licensing-related activities to enhance process efficiency and effectiveness. Integrating risk insights with traditional engineering approaches provides better-reasoned regulatory decisions to appropriately disposition issues that arise in all regulatory matters, including licensing activities. Staff in the Office of Nuclear Reactor Regulation (NRR) are expected to use RIDM, when appropriate, to complement and enhance deterministic approaches to ensure a sound risk-informed regulatory decision is made. Additionally, a risk-informed approach enables NRR to focus resources on the more significant issues and prevents NRR from diverting agency and licensee attention on low safety-significant issues. Furthermore, all NRR staff are expected to use risk insights to improve communication on the significance of issues both within their organizations and with external stakeholders.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b). However, no information normally considered confidential or proprietary is requested.

11. Justification for Sensitive Questions

No sensitive questions are asked in 10 CFR Part 52.

12. Estimate of Industry Burden and Burden Hour Cost.

The overall burden is estimated to be 307,465 hours (294,220 reporting + 13,245 recordkeeping), as reflected in the supplemental burden spreadsheet Tables 1 and 2 based on the information available to the NRC from potential and current applicants and licensees on their plans to submit applications or other license related information.

The NRC staff expects to review applications for three COLs (2 NLWRs and 1 LWR), no design certification renewals, 1 NLWR ML, 1 NLWR DC and 1 NLWR SDA, and issue no licenses over the next three years. The NRC staff also expects to engage in pre-application activities with potential applicants because there are three COL applications being submitted during the next 3 years. (The entities engaging in preapplication activities are already counted as respondents based on the type of application that will be submitted later in the clearance period.) Some applications can take multiple years for NRC to complete the review. In addition, one COL under construction would report on inspections, tests, analyses, and acceptance criteria (ITAAC) related requirements. In the reporting tables, respondents have been annualized (1 respondent over three years appears as 0.33 respondents).

In addition, two LWR units will be operational during the clearance period and will maintain records of any changes to their plant under Part 50. Four DC holders will maintain records of their certified design.

Number of Respondents: 13	
Number of Responses: 59 (48 r	eporting responses plus 11 recordkeepers)

294,220 hours.
13,245 hours
307,465 hours
\$89,164,850

The \$290 hourly rate used in the burden estimates is based on the Nuclear Regulatory Commission's fee for hourly rates as noted in 10 CFR 170.20 "Average cost per professional staff-hour." For more information on the basis of this rate, see the Revision of Fee Schedules; Fee Recovery for Fiscal Year 2022 (87 FR 37197, June 22, 2022).

13. <u>Estimate of Other Additional Costs</u>

The NRC has determined that the records storage cost is roughly proportional to the recordkeeping burden cost. Based on a typical clearance, the recordkeeping storage cost has been estimated to be equal to 0.0004 times the recordkeeping burden cost. Therefore, the recordkeeping storage cost for this clearance is estimated to be $1,536(13,245 \text{ hours } \times 0.0004 \text{ x} \text{ } 290/\text{hour}).$

14. Estimated Annualized Cost to the Federal Government

The staff has developed estimates of annualized costs to the Federal Government related to the conduct of this collection of information. These estimates are based on staff experience and subject matter expertise and include the burden needed to review, analyze, and process the collected information and any relevant operational expenses.

The NRC estimates that the NRC staff will spend approximately 40,469 hours annually over the next 3 years to review the expected submissions associated with the requirements of the Part 52 rule. The cost to the NRC for reviewing these submissions will be \$11,736,010 which is NRC's cost per hour for reactors (\$290) times the number of hours (40,469).

15. <u>Reasons for Change in Burden</u>

The estimated annual burden for Part 52 will decrease from 335,491 hours and 1,428 responses to 307,465 hours and 59 responses, a decrease of 28,026 hours and 1,369 responses.

Each year, the NRC solicits information from potential new reactor applicants using a Regulatory Issue Summary (OMB Clearance #3150-0228, "Voluntary Reporting of Planned New Reactor Applications"). The information provided assists the NRC in determining resource and budget needs as well as aligning the proper allocation and utilization of resources to support applicant submittals, future construction-related activities, and other anticipated licensing and design certification rulemaking actions.

The NRC staff used the information provided by potential applicants to develop estimates for this clearance package. The increase in estimated reporting burden is a result of information we have received from potential new reactor applicants regarding the projected number of anticipated applications and other licensing actions under Part 52.

The NuScale LWR plant design for its US600 plant has been certified and added to the burden, but it is not expected that any combined license (COL) applications will reference that certified design during the clearance period. However, this does increase the recordkeeping requirements. NuScale has submitted a Standard Design Approval Application for its US460 plant that is under review for a plant with larger nuclear plant modules (module power increased from 50 MWe to 77 MWe per module). COL applicants will reference the standard design approval with the larger modules which is reflected in this clearance.

A key change to this clearance is the addition of NLWR technology. The NLWRs are not cooled by water but, for example, by liquid metal, molten salt, or gas. Their designs are expected to need some exemptions from the current regulations.

NRC staff considered how this information collection is affected by the addition of NLWR technologies and expects to review applications for three COLs (2 NLWRs and 1 LWR), no design certification renewals, 1 NLWR ML, 1 NLWR DC and 1 NLWR SDA, and issue

no licenses over the next three years. Some applications will be under 10 CFR Part 52, which are addressed in this clearance, and some LWRs will be under Part 50, for construction permits and operating licenses, which are not addressed here. Thus, the overall change in burden for this clearance decreased slightly. NRC staff considered how this information clearance may be affected by NLWR technologies, given that some NRC regulations and guidance documents are light-water-reactor-centric. Burdens for NLWRs were generally considered to be equivalent to burdens for LWRs.

The burden for reporting decreased from 318,316 hours to 294,220 hours, a decrease of 24,096 hours. The largest changes in reporting burden result from a change in the number of anticipated applications, including NLWRs, and the number of COLs under construction. Notable changes in reporting burden were:

Reporting Increases:

- Section 52.7, The NRC staff estimated that exemption requests will increase from 1 to 25 submissions annually based on the number of applications scheduled and based on the new NLWR designs, an increase of 8,640 hours and 24 responses.
- Subpart C (Combined Licenses), more COL applications and fewer COLs under construction are anticipated; these projections affect individual sections negatively and positively; however, overall, under Subpart C compared to the prior clearance period, the change resulted in an overall increase.
- Subpart F (Manufacturing Licenses), projects one NLWR manufacturing license application is anticipated, whereas none were estimated during the last clearance cycle.

Reporting Decreases:

- There is a decrease of from 2 respondents to 1 respondent annually for preapplication activities resulting in a decrease in burden of 25,000 hours.
- Subpart B (Standard Design Certifications), the numbers estimated in the previous clearance cycle turned out to be high regarding the number of applications submitted. Additionally, NRC staff anticipate fewer DC applications and less DC Renewals for this clearance cycle.
- Appendix D (AP1000 Design Certification). There are no projected submissions during this clearance cycle under Appendix D. This decreased the number of respondents for this section from 9 to zero and reduced the total responses by 27.
- The number of estimated ITAAC closure notifications under 52.99(c)(1) decreased from 41,200 hours and 1,030 responses to 541 hours and 13.5 responses, a decrease of 40,659 hours and 1,016.5 responses. The number of ITAAC notifications is lower than previously anticipated because the number of applications received by the NRC was lower than previously anticipated.

Recordkeeping burden decreased from 17,175 hours to 13,245 hours (a decrease of 3,930 hours). Some records require ongoing maintenance (such as 52.63(b)(2),

requiring licensees who reference a standard DC to maintain records of all changes to the facility. Based on information provided by industry, the NRC staff anticipates a reduction in application submissions that reference a standard DC. In addition, a number of the anticipated applications included in the last renewal were not submitted to the NRC due to business decisions made by industry. As a result, the total number of recordkeepers will decrease from 19 to 11 annually reducing the recordkeeping burden.

The NuScale US600 plant design has been certified. However, there is no indication that any applicants will reference the US600 certified design since NuScale has superseded that design with a standard design approval application with their redesigned US460 plant.

Finally, the estimated burden cost per hour increased from \$278/hr. to \$290/hr.

16. Publication for Statistical Use

This information will not be published for statistical use.

17. Reason for Not Displaying the Expiration Date

The recordkeeping and reporting requirement for this information collection are associated with regulations and are not submitted on instruments such as forms or surveys. For this reason, there are no data instruments on which to display an OMB expiration date. Further, amending the regulatory text of the CFR to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods are not used in this information collection.

DESCRIPTION OF INFORMATION COLLECTION REQUIREMENTS

10 CFR PART 52, LICENSES, CERTIFICATIONS, AND APPROVALS FOR NUCLEAR POWER PLANTS

(3150-0151)

General Provisions

The General Provisions of Part 52 include provisions on the scope of Part 52 requirements; definitions used in Part 52; interpretations of Part 52 requirements; written communications required by Part 52; deliberate misconduct by applicants or licensees; protection of applicant or licensee employees from discrimination for engaging in certain protected activities; completeness and accuracy of applicant and licensee information; exemptions to Part 52 requirements; NRC's ability to combine licenses; jurisdictional limits regarding Part 52 licenses, certifications, and approvals; protection against the effects of attacks and destructive acts; and information collection requirements contained in Part 52.

<u>Section 52.7</u>. This section allows interested persons to apply to the Commission for specific exemptions from the requirements of Part 52. The Commission may grant these exemptions from the requirements of this part upon application or upon its own initiative.

Subpart A – Early Site Permits

Subpart A of 10 CFR Part 52 sets forth the requirements for ESPs, which represent Commission approval of sites for use for commercial nuclear power plants (NPPs). These approvals are available to applicants in advance of submittal of the preliminary design information which 10 CFR Part 50 requires of applicants for CPs.

<u>Sections 52.15(b), 52.16, and 52.17</u>. These sections set forth the requirements for the contents of applications for ESPs.

<u>Section 52.15(b)</u>. This section states that any person who may apply for a CP under 10 CFR Part 50, or for a CP under Part 52, may file an application for an ESP. An ESP application may be filed notwithstanding the fact that an application for a CP or a COL has not been filed in connection with the site for which a permit is sought. ESP applicants will submit the information required by 10 CFR 50.30 according to the criteria listed in 10 CFR 52.3. The burden is covered under 10 CFR 50.30(a), (b), and (f) under OMB clearance 3150-0011.

<u>Section 52.16</u>. This section requires that the application contain all of the information required by 10 CFR 50.33(a) through (d) and (j); i.e., the name, address of the applicant, a description of the business or occupation of applicant, if the applicant is an individual, their citizenship, and if the applicant is a partnership, the name, citizenship and address

of each partner and the principal location where the partnership does business. The burden is covered under 10 CFR 50.33(a)-(d) and 50.33(j) under OMB clearance 3150-0011.

<u>Section 52.17</u>. This section requires from ESP applicants much of the technical information which 10 CFR Part 50 requires of applicants for CPs.

<u>Section 52.17(a)(1)</u>. This section requires the applicant to submit a site safety analysis report (SAR) that includes information about the site location and proposed facilities for which the site may be used. The site SAR must contain information such as the number, type, and thermal power level of the facilities for which the site may be used; anticipated maximum levels of radiological and thermal effluents each facility will produce; type of cooling systems associated with each facility; boundaries of the site; proposed general location of each facility on the site; seismic, meteorological, hydrologic, and geologic characteristics of the proposed site; location of nearby industrial, military, or transportation facilities and routes; existing and projected population profiles of the area around the site; and description and safety assessment of the site. The assessment must also contain an analysis and evaluation of the major structures, systems, and components (SSCs) of the facility that bear significantly on the acceptability of the site. Improved document control practices, allowing for electronic rather than hard-copy submittals, have resulted in significant burden savings under this section.

<u>Section 52.17(a)(2)</u>. This section requires ESP applicants to submit an environmental report in accordance with 10 CFR 51.50(b). Burden is covered under 51.50, OMB clearance 3150-0021.

<u>Section 52.17(b)(1)</u>. This section requires an ESP applicant to identify physical characteristics of the proposed site that could pose a significant impediment to the development of emergency plans. This section also requires that, if such physical characteristics are identified, the applicant identifies measures that would, when implemented, mitigate or eliminate the significant impediment.

<u>Sections 52.17(b)(2)(i) and 52.17(b)(3)</u>. These sections allow an applicant to propose major features of the emergency plans in the site SAR, in accordance with the pertinent standards of 10 CFR 50.47, and the requirements of Appendix E to 10 CFR Part 50. An eligible ESP applicant for an SMR or ONT, proposing an emergency plan with major features described, may submit in accordance with the applicable requirements of 10 CFR 50.160. If the eligible ESP applicant elects to follow the new performance-based requirements in 10 CFR 50.160, then the emergency plans may not be required to contain offsite planning. If the applicant chooses to submit this information, Section 52.17(b)(3) requires that it may also include the proposed inspections, tests, and analyses that the holder of a COL referencing the ESP 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 operate in conformity with the license, the provisions of the AEA, and the NRC's regulations.

<u>Sections 52.17(b)(2)(ii) and 52.17(b)(3)</u>. Alternatively, these sections allow an ESP applicant to propose complete and integrated emergency plans in the site SAR for review and approval by the NRC, in consultation with the Department of Homeland Security, in accordance with the applicable standards of 10 CFR 50.47, and the requirements of Appendix E to 10 CFR Part 50. An eligible ESP applicant for an SMR or ONT, proposing a complete and integrated emergency plan, may submit in accordance with the applicable requirements of 10 CFR 50.160. To the extent approval of emergency plans is sought, the application must contain the information required by § 50.33(g) and (j). If the eligible ESP applicant elects to follow the new performance-based requirements in 10 CFR 50.160, in lieu of 10 CFR 50.47 and Appendix E to 10 CFR Part 50, then the emergency plans may not be required to contain offsite planning.

If the applicant chooses to submit this information, Section 52.17(b)(3) requires that it must also include the proposed inspections, tests, and analyses that the holder of a COL referencing the ESP 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 operate in conformity with the license, the provisions of the AEA, and the NRC's regulations.

<u>Section 52.17(b)(4)</u>. This section requires that, under Sections 52.17(b)(1) and (b)(2)(i), the application must include a description of contacts and arrangements made with Federal, State, and local governmental agencies with emergency planning responsibilities. This section also requires that, under Section 52.17(b)(2)(ii), the applicant make good faith efforts to obtain from the same governmental agencies certifications 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) that these agencies are committed to executing their responsibilities under the plans in the event of an emergency.

<u>Section 52.17(c)</u>. This section requires that if the applicant wishes to obtain a limited work authorization (LWA), then the information required by Section 50.10(d)(3) must be included in the ESP application. ESP applications submitted before and pending as of November 8, 2007, are to follow requirements under the former Section 52.17(c). This information is needed by the NRC in its determination of whether to issue the LWA.

The information required by Sections 52.15(b), 52.16, and 52.17 is needed by the Commission to perform its statutory duty of assessing and ensuring an acceptable environmental effect of the NPP at the site, the suitability of the subject site from a safety standpoint, and the adequacy of emergency planning and preparedness, in accordance with the applicable standards set forth in 10 CFR Parts 50 and 100, and the Appendices thereto. The burden is covered under 50.10(d)(3), OMB clearance 3150-0011.

<u>Section 52.27</u>. This section allows an ESP holder to request a LWA in accordance with Section 50.10 and clarifies how an ESP holder would request a LWA.

<u>Section 52.29(a)</u>. This section contains requirements for a renewal application of any ESP previously issued by the Commission. It requires the updating of information

contained in the original application. This information is needed for the same reasons and purposes set out above with respect to the applicant's original filing under Sections 52.15, 52.16, and 52.17.

<u>Section 52.35</u>. This section, while permitting the holder of an ESP to put the site to non-nuclear use during the term of the permit, requires the holder to notify the agency of the non-nuclear use. This information is necessary so that the NRC may determine whether the non-nuclear use is consistent with the terms of the permit.

<u>Section 52.39(b)</u>. This section requires applicants for a CP, OL, or COL who have filed an application referencing an ESP to update their emergency preparedness information provided under 52.17(b) and discuss whether the updated information materially changes the bases for compliance with applicable NRC requirements. This information is needed to ensure that any changes to emergency planning information approved at the ESP stage would not affect the conclusions drawn by the NRC regarding the suitability of the site from an emergency preparedness standpoint.

<u>Section 52.39(d)</u>. This section states that an applicant referencing an ESP may include in its application a request for a variance from one or more site characteristics, design parameters, or terms and conditions of the ESP, or from the site SAR. A variance will not be issued once the CP, OL, or COL is issued. The NRC would use the information in an applicant's request for a variance to determine if the information that did not conform to the ESP was in conformance with the NRC's regulations.

<u>Section 52.39(e)</u>. This section states that the holder of an ESP may not make changes to the ESP, including the site analysis safety report, without prior Commission approval. The request for an ESP change must be in the form of an application for a license amendment and must meet the requirements of Sections 50.90 and 50.92. Burden is covered under 50.90, OMB clearance 3150-0011.

Subpart B - Standard Design Certifications

Subpart B of Part 52 provides for certification of a standardized design without specifying a particular site, the goal of which is to resolve all design issues that are technically relevant and not site-specific. Once certified, the design can be referenced in any number of applications for CPs or COLs, thus making one submittal of design information serve for several licensing reviews.

<u>Section 52.45</u>. This section states that an application for DC may be filed even if an application for a CP or COL for such a facility has not been filed. The application must comply with the applicable filing requirements of 52.3 and 2.811 through 2.819.

<u>Sections 52.46 and 52.47</u>. These sections set forth the requirements for the contents of applications for the certification of a standard plant design. The information required is generally the same design information required of applicants for OLs under 10 CFR Parts 20, 50, 73, and 100, plus some additional information. Until the Commission makes its final decision on all safety questions associated with the design,

procurement specifications and construction and installation specifications must be retained.

<u>Section 52.46</u>. This section requires DC applicants to submit the information required by 10 CFR 50.33, which includes information of a general nature such as name of and address of the applicant, a description of the business, whether the applicant is an individual, partnership, or corporation, and the citizenship of the individual, the members of the partnership, or the owners of the corporation. Burden covered under 10 CFR 50.33 (a) – (c) and 50.33 (j), approved by OMB under Clearance No. 3150-0011.

<u>Section 52.47</u>. The introductory paragraph to Section 52.47 requires that information normally contained in certain procurement specifications and construction and installation specifications be completed and available for audit if the information is necessary for the Commission to make its safety determination.

<u>Section 52.47(a)</u>. This section requires that a DC application contain a Final Safety Analysis Report (FSAR) that describes the facility; presents the design bases and the limits on its operation; presents a safety analysis of the SSCs and of the facility as a whole; and contains the interface requirements to be met by those portions of the plant for which the application does not seek certification, including justification that compliance with the interface requirements is verifiable through inspection, testing, or analysis. Section 52.47(a)(6) requires submission of the information required by 20.1406 on minimization of contamination (covered under OMB clearance 3150-0014). Section 52.47(a)(27) accounts for the majority of the burden under 10 CFR 52.47. It requires a DC application to contain a FSAR that describes the design-specific probabilistic risk assessment (PRA) and its results. Improved document control practices, allowing for electronic rather than hard-copy submittals, have resulted in significant burden savings under this section.

<u>Section 52.47(b)</u>. This section requires that a DC application contain: (1) the proposed inspections, tests, analyses, and acceptance criteria (ITAAC) that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, a plant that incorporates the DC is built and will operate in accordance with the DC, the provisions of the Act, and the Commission's regulations; and (2) an environmental report as required by 10 CFR 51.55 (covered under OMB clearance 3150-0021).

<u>Section 52.47(c)(1)</u>. This section requires that an application for certification of a nuclear power reactor design that is an evolutionary change from light-water reactor (LWA) designs of plants must provide an essentially complete NPP design except for site-specific elements.

<u>Section 52.47(c)(2)</u>. This section requires that an application for certification of a nuclear power reactor design that differs significantly from the LWA designs described in paragraph (c)(1) or uses simplified, inherent, passive, or other innovative means to accomplish its safety functions must provide an essentially complete nuclear power reactor design except for site-specific elements and meet the requirements of 10 CFR 50.43(e).

<u>Section 52.47(c)(3)</u>. This section requires that an application for certification of a modular nuclear power reactor design describe the various options for the configuration of the plant and site, including variations in, or sharing of, common systems, interface requirements, and system interactions. This section also requires that the final safety analysis account for differences among the various options, 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.

The information required by Sections 52.45, 52.46, and 52.47 is needed by the Commission to perform its statutory duty of reaching a final conclusion on all safety questions associated with the design before the certification is granted and assessing the applicant's proposed means of assuring that construction conforms to the design, in accordance with the standards set out in 10 CFR Parts 20, 50 and its appendices, 51, 73, and 100. The information is also needed to ensure the NRC meets its obligations under NEPA.).

<u>Section 52.51</u>. The requirement in the current information collection under this section that applicants for DC must submit a design control document (DCD) prior to completing a proposed rule for certifying a standard design by rulemaking is essentially the same requirement of Section 52.47(a).

<u>Section 52.57(a)</u>. This section provides a procedure for application for renewal of a DC. The regulation requires updating any of the information that was submitted under Sections 52.46 and 52.47. The Commission will require, before renewal of certification, that information normally contained in certain procurement specification and construction and installation specifications be completed and available for audit if the information is necessary for the Commission to make its safety determination. This updating of information is required by the Commission staff to make the determinations under Section 52.48.

<u>Section 52.63(b)(1)</u>. This section states that an applicant or licensee who references a standard design certification rule may request an exemption from one or more elements of the DC information. Information submitted with an exemption request would be used to determine if the exemption is authorized by law, will not present an undue risk to public health and safety, and is consistent with the common defense and security, or if other special circumstances are present requiring consideration of the exemption request.

<u>Section 52.63(b)(2)</u>. This section requires that licensees who reference a standard DC must maintain records of all changes to the facility, and these records must be available for audit until the date of termination of the license. Retention of this information is necessary to ensure that the NRC has the opportunity to review any changes to the referenced certified design made after NRC's review and approval of the license referencing the certified design.

<u>Section 52.63(c)</u>. This section requires applicants for CPs, OLs, or COLs who reference standard DCs to acquire or complete, and make available for audit, detailed

design-related information normally contained in procurement, construction, and installation specifications. This information must be retained until the Commission makes its safety determination. This information is necessary to provide the NRC with access to more detailed design information that it may need in order to make its safety determination during the review of the DC application.

Subpart C - Combined Licenses

Subpart C of Part 52 sets forth requirements for COLs, which Section 161h of the AEA makes available. Section 161(h) says that the Commission may combine in a single license activity licensed separately; Part 52 does so for CPs and OLs. It thus requires that the design information normally not submitted until construction is complete be submitted before construction begins. Once submitted and approved, this design information does not have to be reconsidered when construction is nearing completion. Ideally, the applicant for this COL would incorporate by reference both an ESP and a certified design and thus have to submit only a fraction of the information submitted for a CP and OL under Part 50.

<u>Section 52.73(b)</u>. This section requires applicants for a COL who reference standard DCs, SDAs, or MLs to acquire or complete, and make available for audit, detailed design-related information normally contained in procurement, construction, and installation specifications. This information must be retained until the Commission makes its safety determination.

<u>Sections 52.75, 52.77, 52.79, and 52.80</u>. These sections set forth requirements for content of applications for COLs.

<u>Section 52.75</u>. This section requires COL applicants to submit the information required by 10 CFR 50.30 according to the criteria listed in 10 CFR 52.3 (covered under OMB clearance 3150-0011).

<u>Section 52.77</u>. This section requires COL applicants to submit the information required by 10 CFR 50.33 (covered under OMB clearance 3150-0011).

<u>Section 52.79(a)</u>. This section addresses a COL application that does not reference any other type of Part 52 license, certification, or approval. It requires that a COL application contain a FSAR that describes the facility; presents the design bases and the limits on its operation; and presents a safety analysis of the SSCs of the facility as a whole. An eligible COL application for a SMR or ONT has the option to submit in accordance with the applicable requirements of 10 CFR 50.160. If the eligible COL applicant elects to follow the new performance-based requirements in 10 CFR 50.160, in lieu of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50, then the emergency plans may not be required to contain offsite planning. Section 52.79(a)(45) requires submission of the information required by 20.1406 on minimization of contamination (covered under OMB clearance 3150-0014). Section 52.79(a)(46) accounts for the majority of the burden under 10 CFR 52.79. It requires a COL application to contain a FSAR that describes the plant-specific probabilistic risk assessment or analysis (PRA) and its results. Section 52.79(a) requires that the FSAR shall include a level of information sufficient to enable

the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a COL.

<u>Section 52.79(b)</u>. This section addresses a COL application that references an ESP and states that the FSAR need not contain information or analyses submitted to the Commission in connection with the ESP, provided; however, that the FSAR must either include or incorporate by reference the ESP site SAR and must 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 ESP.

<u>Section 52.79(c)</u>. This section addresses a COL application that references a design approval and states that 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 SDA 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.

<u>Section 52.79(d)</u>. This section addresses a COL application that references a DC and states that the FSAR need not contain information or analyses submitted to the Commission in connection with the DC, provided; however, that the FSAR must either include or incorporate by reference the standard DC 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 DC. Improved document control practices, allowing for electronic rather than hard-copy submittals, have resulted in significant burden savings under this section.

<u>Section 52.79(e)</u>. This section addresses a COL application that references a manufactured reactor licensed under Subpart F of 10 CFR Part 52 and states that the FSAR need not contain information or analyses submitted to the Commission in connection with the ML provided; however, that the FSAR must either include or incorporate by reference the ML FSAR and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the site parameters for the manufactured reactor are bounded by the site where the manufactured reactor is to be installed and used.

<u>Section 52.80(a)</u>. This section requires that a COL application contain the proposed inspections, tests, and analyses, including those applicable to emergency planning, that the licensee shall perform, and the acceptance criteria which 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 operate in conformity with the COL, the provisions of the AEA, and the NRC's regulations.

<u>Sections 52.80(b)</u>. This section states that an environmental report is required in accordance with 10 CFR 51.50(c) if a LWA is not requested in conjunction with a COL application, or in accordance with Sections 51.49 and 51.50(c) if a LWA is requested in

conjunction with a COL application. The information in paragraph (b) is needed by the NRC to assess the environmental impacts associated with the COL application. The burden for this requirement is covered under 10 CFR 51.50, approved by OMB under Clearance 3150-0021.

<u>Section 52.80 (c)</u>. This section states that if the applicant is requesting that the LWA be issued before issuance of a COL, the LWA application must include the information otherwise required by 10 CFR 50.10. The information in paragraph (c) is needed by the NRC to evaluate the safety and environmental aspects of the proposed LWA activities. The burden is covered under 10 CFR 50.10(d)(3), approved by OMB under Clearance 3150-0011.

<u>Section 52.80(d)</u> requires applicants for power reactor operating licenses under Part 52 to include in their applications information on the plan for implementing the requirements of 10 CFR 50.155(b), including a schedule for achieving compliance as well as a description of the integrated response capability required by 10 CFR 50.155(b) and the requirement and planned locations of the equipment on which the strategies and guidelines will rely. This is the same requirement as that contained in Section 50.34(i) for applicants for a new power reactor operating license under Part 50. The NRC does not expect any new applicants under Part 50 for a power reactor operating license or under Part 52 for a combined license for the next three years.

The information required by Sections 52.75, 52.77, 52.79, and 52.80 is needed by the Commission to perform its statutory duty of assessing and ensuring an acceptable environmental effect of the NPP at the site, the suitability of the subject site from a safety standpoint, the adequacy of emergency planning and preparedness, the adequacy of the proposed design, and the acceptability of the proposed design at the selected site in accordance with the applicable standards set forth in 10 CFR Parts 20, 50, 51, 73, and 100, and the Appendices thereto.

<u>Section 52.93(a)</u>. This section allows applicants for a COL under this subpart, or any amendment to a COL, to include in the application a request for an exemption from one or more of the Commission's regulations. Information submitted with an exemption request would be used to determine if the exemption is authorized by law, will not present an undue risk to public health and safety, and is consistent with the common defense and security, or if other special circumstances are present requiring consideration of the exemption request.

<u>Section 52.93(b)</u>. This section allows applicants for a COL referencing an ESP to include in the application a request for a variance from one or more site characteristics, design parameters, or terms and conditions of the permit, or from the site SAR. The NRC would use the information in an applicant's request for a variance to determine if the information that did not conform to the ESP was in conformance with the NRC's regulations.

<u>Section 52.93(c)</u>. This section allows applicants for a COL referencing a nuclear power reactor manufactured under a ML to 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 NRC would use the information in an applicant's request for a departure to determine if the information that did not conform to the ML or approved design of the manufactured reactor was in conformance with the NRC's regulations.

<u>Section 52.99(a)</u>. This section requires licensees to submit to the NRC, no later than 1 year after issuance of a COL, a detailed schedule for completing the inspections, tests, or analyses in the ITAAC. Licensees are required to submit updates to the ITAAC schedule every 6 months thereafter and, within 1 year of their scheduled date for initial loading of fuel, licensee must submit updates to the ITAAC schedule every 30 days until the final ITAAC is completed or until the final notification is provided to the NRC under paragraph 52.99(c). Submittal of the schedule and updates required by this section is necessary to ensure the NRC has sufficient information to plan all of the activities necessary for the NRC to support the Commission's finding whether all of the ITAAC have been met prior to the licensee's scheduled date for fuel load.

Section 52.99(c). Paragraph (c)(1) of this section requires that, after issuance of the COL, the licensee notify the NRC that the inspections, tests, or analyses in the ITAAC have been successfully completed and that the corresponding acceptance criteria have been met. Paragraph (c)(2) requires that the licensee notify the NRC in a timely manner of new information that materially alters the basis for determining that either inspections. tests, or 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, or analyses have been performed as required, and the prescribed acceptance criteria are met. Paragraph (c)(3) requires that, 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 inspections, tests, or analyses for all uncompleted ITAAC will be successfully completed and all acceptance criteria will be met prior to operation. The notification must provide sufficient information to demonstrate that the inspections, tests, or analyses will be successfully completed and the 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 inspections, tests, and analyses and determining that the acceptance criteria have been met. The information required by this section is needed so that the NRC can determine what activities it will need to undertake to determine if the acceptance criteria for each of the ITAAC have been met. In addition, the requirements in paragraphs (c)(1) and (c)(2) are needed to ensure that interested persons will be able to meet the AEA, Section 189.a(1), threshold for requesting a hearing with respect to both completed and as-yet uncompleted ITAAC. Paragraph (c)(4) requires that the licensee to notify the NRC that all ITAAC are complete (All ITAAC Complete Notification). When the licensee submits the all ITAAC complete notification, the NRC expects that all activities requiring ITAAC post-closure letters have been completed, that the associated ITAAC determination bases have been updated, and that all required notifications under paragraph (c)(2) have been made.

<u>Sections 52.99 (d)(1) and (d)(2)</u>. These sections states that in the event that an activity is subject to an ITAAC derived from a referenced ESP or standard DC and the licensee

has not demonstrated that the ITAAC has been met, the licensee may take corrective actions to successfully complete that ITAAC, request a variance from the ESP ITAAC, or request an exemption from the standard DC ITAAC, as applicable. In the event that an activity is subject to an ITAAC not derived from a referenced ESP or standard DC and the licensee has not demonstrated that the ITAAC has been met, the licensee may take corrective actions to successfully complete that ITAAC or request a license amendment under ' 52.98(f). The information submitted under this section would be used by the NRC to determine if the applicant met the NRC's requirements related to the particular ITAAC that had not been successfully completed.

<u>Section 52.103(a)</u>. This section requires that the licensee shall notify the NRC of its scheduled date for initial loading of fuel no later than 270 days before the scheduled date and shall notify the NRC of updates to its schedule every 30 days thereafter. This information is necessary to facilitate timely NRC publication of the hearing notice required under Section 52.103(a) and NRC staff scheduling of inspection and audit activities to support NRC staff determinations of the successful completion of ITAAC under Section 52.99.

<u>Section 52.110(a)</u>. This section requires that, when a licensee has determined to permanently cease operations, the licensee, within 30 days, must submit a written certification to the NRC consistent with the requirements of section 52.3(b)(8). In addition, once fuel has been permanently removed from the reactor vessel, the licensee shall submit a written certification to the NRC that meets the requirements of section 52.3(b)(9). This information is necessary to alert the NRC to a licensee's intention to stop operating so that the NRC can prepare for decommissioning of the facility.

<u>Section 52.110(d)</u>. This section requires that, before or within 2 years following permanent cessation of operations, the licensee submit a post shutdown decommissioning activities report (PSDAR) to the NRC, and a copy to the affected State(s). This information is needed for the NRC to assess the adequacy of the licensees decommissioning activities.

<u>Section 52.110(g)</u>. This section requires that, in taking actions permitted under 10 CFR 50.59 (changes, tests, and experiments) following submittal of the post-shutdown decommissioning activities report, the licensee shall notify the NRC in writing and send a copy to the affected State(s), before performing any decommissioning activity inconsistent with, or making any significant schedule change from, those actions and schedules described in the PSDAR, including changes that significantly increase the decommissioning cost. This information is necessary for the NRC to assess the adequacy of any proposed changes to its decommissioning plans.

<u>Section 52.110(h)(3)</u>. This section requires that within 2 years following permanent cessation of operations, if not already submitted, the licensee shall submit a site-specific decommissioning cost estimate. This information is necessary for the NRC to assess the adequacy of the decommissioning plan cost estimate.

<u>Section 52.110(h)(4)</u>. This section requires that for decommissioning activities that delay completion of decommissioning by including a period of storage or surveillance,

the licensee shall provide a means of adjusting cost estimates and associated funding levels over the storage or surveillance period. This information is necessary to allow the NRC to assess the adequacy of the revised decommissioning plan cost estimate.

Subpart E - Standard Design Approvals

Subpart E of 10 CFR Part 52 provides for NRC staff approval of a standardized design for a nuclear power reactor without specifying a particular site. An applicant for a CP or COL may reference a SDA.

<u>Sections 52.135, 52.136, and 52.137</u>. These sections set forth the requirements for the contents of applications for SDAs.

<u>Section 52.135</u>. This section states that any person may submit a proposed standard design for a nuclear power reactor of the type described in 10 CFR 50.22 to the NRC staff for its review. The submittal may consist of either the final design for the entire facility or the final design of major portions thereof and must be made in the same manner as provided in 10 CFR 50.30 and 52.3 for license applications. Burden covered under 10 CFR 50.30, approved by OMB under Clearance No. 3150-0011.

<u>Section 52.136</u>. This section requires design approval applicants to submit the information required by 10 CFR 50.33(a) through (d) and (j). Burden covered under 10 CFR 50.33(a) – (d) and 50.33 (j), approved by OMB under Clearance No. 3150-0011.

<u>Section 52.137(a)</u>. This section requires that a design approval application contain a FSAR that describes the facility; presents the design bases and the limits on its operation; and presents a safety analysis of the SSCs and of the facility as a whole. This section also requires a description, analysis, and evaluation of the interfaces between the standard design and the balance of the NPP. Section 50.137(a)(6) requires submission of the information required by 20.1406 on minimization of contamination (covered under OMB clearance 3150-0014). Section 52.137(a)(25) accounts for the majority of the burden under 10 CFR 52.137. It requires a design approval application to contain a FSAR that describes the design-specific PRA and its results.

The information required by Sections 52.135, 52.136, and 52.137 is needed by the NRC staff to reach a final conclusion on all safety questions associated with the design before the approval is granted, in accordance with the standards set out in 10 CFR Parts 20, 50 and its appendices, 73, and 100.

Subpart F - Manufacturing Licenses

Subpart F of 10 CFR Part 52 sets out the requirements and procedures applicable to Commission issuance of a license authorizing manufacture of nuclear power reactors to be installed at sites not identified in the ML application. A nuclear power reactor manufactured under a ML issued may only be transported to and installed at a site for which either a CP under 10 CFR Part 50 or a COL under 10 CFR Part 52 has been issued.

<u>Section 52.155</u>. This section requires ML applicants to submit the information required by 10 CFR Sections 52.3 and 50.30 and is covered under OMB clearance 3150-0011.

<u>Section 52.156</u>. This section requires ML applicants to submit the information required by 10 CFR 50.33(a) through (d), and (j) and is covered under OMB clearance 3150-0011.

<u>Section 52.157</u>. This section requires that a ML application contain a FSAR containing a level of design information sufficient to enable the Commission to judge the applicant's proposed means of assuring 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 construction and installation specifications by an applicant who seeks to use the manufactured reactor, and permit the preparation of acceptance and inspection requirements by the NRC. Section 52.157(f)(9) requires submission of the information required by 20.1406 on minimization of contamination (covered under OMB clearance 3150-0014). Section 52.157(f)(31) accounts for the majority of the burden under 10 CFR 52.157. It requires a ML application to contain a FSAR that describes the design-specific PRA and its results.

<u>Sections 52.158(a)</u>. These sections require that a ML application contain the proposed inspections, tests and analyses that the licensee who will be operating the reactor shall perform, and the acceptance criteria which are necessary and sufficient to provide reasonable assurance that: (1) if the inspections, tests, and analyses are performed and the acceptance criteria met the reactor has been manufactured in conformance with the ML, the provisions of the AEA, and the NRC's regulations; and (2) the reactor will operate in conformity with design characteristics in the ML, any license authorizing operation of the reactor as part of a NPP, the provisions of the Act, and the NRC's regulations.

The information required by Sections 52.155, 52.156, and 52.157 is needed by the NRC staff to reach a final conclusion on all safety questions associated with the design and manufacturing process before the ML is granted, in accordance with the standards set out in 10 CFR Parts 20, 50 and its appendices, 73, and 100.

<u>Section 52.158(b)</u>. This section requires that a ML application contain an ER as required by 10 CFR 51.54. This information is needed to ensure the NRC meets its obligations under NEPA.

<u>Section 52.171(b)</u>. This section requires that a change to the design must be in the form of an application for a license amendment and must meet the requirements of 10 CFR 50.90 through 50.92. An applicant or licensee who references or uses a nuclear power reactor manufactured under a ML under this subpart may also request a departure from the design characteristics, site parameters, terms and conditions, or approved design of the manufactured reactor. The NRC would use the information in an applicant's request for a departure to determine if the information that did not conform to

the ML or approved design of the manufactured reactor was in conformance with the NRC's regulations. The burden is covered under 10 CFR 50.90 & 50.91, approved by OMB under Clearance No 3150-0011.

<u>Section 52.177</u>. This section contains requirements for renewal of an application for a ML previously issued by the NRC. An application for renewal requires the updating of information contained in the original application. The need for the information is a renewal application is the same as the need for the information in the original application.

Appendices A through G - Design Certification Rule

These appendices to 10 CFR Part 52 constitute the standard DCs for the U.S. Advanced Boiling Water Reactor, System 80+, AP600, AP1000, ESBWR, APR1400, and NuScale designs, in accordance with Part 52, Subpart B, and allow interested parties to reference one of these designs in an application for a COL.

<u>Section IV.A.2.a</u> requires a plant-specific DCD as part of the COL application. This section partially fulfills the requirements for contents of applications for a COL (10 CFR 52.79) and ensures that the COL applicant commits to complying with the DCD.

<u>Section IV.A.2.b</u> requires reports on departures from and updates to the DCD, under Section X.B of Appendix G, as part of the COL application. This section ensures that the COL application is up to date.

<u>Section IV.A.2.c</u> requires plant-specific technical specifications (10 CFR 50.36 and 50.36a) as part of the COL application. This information collection is the same as for 10 CFR 50.36, but the timing of the burden is earlier (10 CFR 52.79).

<u>Section IV.A.2.d</u> requires information demonstrating compliance with site parameters and interface requirements as part of the COL application. This section fulfills part of the requirements for a COL (10 CFR 52.79).

<u>Section IV.A.2.e</u> requires the COL applicant to address COL items in the generic DCD as part of the COL application. This section fulfills part of the requirements for a COL (10 CFR 52.79).

<u>Section IV.A.2.f</u> requires information required by 10 CFR 52.47(a), that is not within the scope of this design certification, as part of the COL application. This section fulfills part of the requirements for a COL (10 CFR 52.79).

<u>Section IV.A.2.g</u> requires information required by 10 CFR 52.47(a), that is not within the scope of this design certification, as part of the COL application. This section fulfills part of the requirements for a COL (10 CFR 52.79).

<u>Section IV.A.2.h</u> requires information required by 10 CFR 52.47(a), that is not within the scope of this design certification, as part of the COL application. This section fulfills part of the requirements for a COL (10 CFR 52.79).

Section IV.A.3_requires the COL applicant to include, in the plant-specific DCD, the proprietary and safeguards information referenced in the generic DCD to ensure that the applicant has actual notice of these requirements. This section fulfills part of the requirements for contents of applications for a COL (10 CFR 52.79).

<u>Section IV.A.4</u> requires the COL applicant to include, as part of the COL application, information demonstrating that an entity other than NuScale Power is qualified to supply the NuScale design, unless NuScale Power supplies the design for the COL applicant's use.

<u>Section X.A.1</u> requires the applicant for this design certification to maintain the generic DCD and the sensitive unclassified non-safeguards information (including proprietary information) and safeguards information for the period that this certification may be referenced. This section ensures that the design information will be available to applicants that may reference this design certification and is similar to the requirements in 10 CFR 50.71(e).

<u>Section X.A.2</u> requires an applicant or licensee who references this design certification to maintain the plant-specific DCD throughout the period of the application and for the term of the license. This section is similar to the requirements in 10 CFR 50.71(e).

<u>Section X.A.3</u> requires an applicant or licensee who references this design certification to prepare and maintain the bases for its changes to this design certification throughout the period of the application and the term of the license. This section is similar to the requirements in 10 CFR 50.59(d).

<u>Section X.A.4</u>.a requires the applicant for this design certification to maintain a copy of the aircraft impact assessment (AIA) performed to comply with the requirements of 10 CFR 50.150(a) for the term of the certification (including any period of renewal).

<u>Section X.A.4.b</u> requires COL applicants or licensees who references this design certification to maintain a copy of the AIA performed to comply with the requirements of 10 CFR 50.150(a) throughout the pendency of the application and for the term of the license (including any period of renewal).

<u>Section X.B.1</u> requires COL applicants or licensees who reference this design certification to submit reports on departures from the plant-specific DCD. This section is similar to the requirements in 10 CFR 50.59(d)(2).

<u>Section X.B.2</u> requires COL applicants or licensees who reference this design certification to submit updates to its plant-specific DCD that reflect generic changes to and plant specific departures from the generic DCD. This section is similar to the requirements in 10 CFR 50.71(e).

<u>Section X.B.3.a</u> requires submittal of reports and updates to the generic DCD with the initial COL application. This requirement ensures that the initial application is up-to-date and partially fulfills the requirements contents of applications in 10 CFR 52.79.

<u>Section X.B.3.b</u> requires that during the period of review of the application and construction of a facility that references this design certification, summary reports on changes to the design must be submitted semi-annually. These reports are needed to provide timely notification of design changes during the critical period of application review and facility construction.

<u>Section X.B.3.c</u> states that after the Commission has authorized operation of the nuclear plant, the frequency for submitting reports and updates returns to the frequency required by 10 CFR 50.59 and 50.71, respectively.

<u>Appendix N Standardization of Nuclear Power Plant Designs: Combined Licenses to</u> <u>Construct and Operate Nuclear Power Reactors of Identical Design at Multiple Sites</u>

This appendix sets out requirements applicable to situations in which applications for COLs under Subpart C of Part 52 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. The information required by paragraphs 2, 3, and 4, is necessary for the NRC staff to assess the adequacy of the applicants' safety and environmental evaluations in support of their application to construct and operate plants of identical design at multiple sites.

<u>Paragraph 2</u>. This paragraph requires that each COL application submitted pursuant to this appendix be submitted as specified in 52.75 and 10 CFR 2.101. It also requires that each application state that the applicant wishes to have the application considered under 10 CFR Part 52, Appendix N, and list each of the applications to be treated together under this appendix.

<u>Paragraph 3</u>. This paragraph requires that each application include the information required by 52.77, 52.79, and 52.80(a) and that the application must identify the common design, and, if applicable, reference a standard DC under Subpart B of this part, or the use of a reactor manufactured under Subpart F of this part. This section also requires that the FSAR for each application either incorporate by reference or include the final safety analysis of the common design, including, if applicable, the FSAR for the referenced DC or the manufactured reactor.

<u>Paragraph 4</u>. This paragraph requires that each COL application submitted pursuant to this appendix contain an ER as required by 52.80(b), and which complies with the applicable provisions of 10 CFR Part 51 and states that the application may incorporate by reference a single ER on the environmental impacts of the common design.

GUIDANCE DOCUMENTS FOR INFORMATION COLLECTION REQUIREMENTS CONTAINED IN 10 CFR PART 52, LICENSES, CERTIFICATIONS, AND APPROVALS FOR NUCLEAR POWER PLANTS

(3150-0151)

Title	Accession number
Regulatory Guide 1.206, Revision 1	ML18131A181
"Applications for Nuclear Power Plants"	
Regulatory Guide 1.233, Revision 0	ML20091L698
"Guidance for a Technology-Inclusive, Risk-	
Informed, and Performance-Based	
Methodology to Inform the Licensing Basis	
and Content of Applications for Licenses,	
Certifications, and Approvals for Non-Light	
Water Reactors"	
Regulatory Guide 1.232, Revision 0	ML17325A611
"Developing Principal Design Criteria for Non-	
Light Water Reactors"	
Regulatory Guide 1.242, Revision 0	ML23226A036
"Performance Based Emergency	
Preparedness for Small Modular Reactors,	
Non-Light-Water Reactors, and Non-Power	
Production or Utilization Facilities"	
Regulatory Guide 1.87, Revision 2	ML22101A263
"Acceptability of ASME Code Section III,	
Division 5, 'High Temperature Reactors'"	
NUREG-2245, "Acceptability of 2017 Edition	ML23030B636
of ASME Section III, Division 5, 'High	
Temperature Reactors'"	
NUREG/CR-7299, "Fuel Qualification for	ML22339A161
Molten Salt Reactors"	
Regulatory Guide 1.247, "TRIAL -	ML21235A008
Acceptability of Probabilistic Risk	
Assessment Results for Non-Light Water	
Reactor Risk-Informed Activities."	
NUREG-2246, "Fuel Qualification for	ML22063A131
Advanced Reactors, Final"	
Design Review Guide (DRG): Instrumentation	ML21011A140
and Controls for Non-Light-Water Reactor	
(Non-LWR) Reviews	
Regulatory Guide 1.246, Revision 0,	ML22061A244
"Acceptability of ASME Code, Section XI,	
Division 2, 'Requirements for Reliability and	

Integrity Management (RIM) Programs for	
Nuclear Power Plants.' for Non-Light Water	
Reactors"	