

DRAFT SUPPORTING STATEMENT FOR  
10 CFR PART 50.55a  
CODES AND STANDARDS

3150-0264

DESCRIPTION OF INFORMATION COLLECTION

Existing regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 (OMB Clearance No. 3150-0011) specify recordkeeping and reporting requirements associated with structures, systems, and components (SSCs) used in a nuclear power plant. 10 CFR 50.55a (OMB Clearance No. 3150-0264) incorporates by reference three regulatory guides (RGs) that list code cases that the NRC has determined to be acceptable for use when implementing the editions and addenda of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code and ASME Operation and Maintenance (OM) Code incorporated by reference in this section. The subject rulemaking would, in part, revise RG 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," to approve the use of ASME Code Case N-752-2, titled "Risk-Informed Categorization and Treatment for Repair/Replacement Activities on Class 2 and 3 Items, Section XI, Division 1," with conditions as specified in the RG. This code case includes certain provisions as they pertain to "treatment" requirements, meaning those quality assurance programs, testing, reporting requirements and other activities intended to add confidence that SSCs can perform their intended safety functions when needed. The rulemaking would provide a voluntary alternative set of requirements under which a licensee may obtain relief from some unnecessary regulatory burden for those SSCs that are determined through a risk-informed categorization process to be of low safety-significance. The rule is intended to provide more flexibility to licensees in the application of treatment requirements for low safety-significant SSCs, by replacing some of the prescriptive programmatic requirements with more general performance requirements. The rule would modify the recordkeeping requirements only for those licensees or applicants who choose to implement the alternative requirements.

To use the alternative provisions of Code Case N-752-2, the licensee or applicant would be required to evaluate the safety-significant functions of SSCs and categorize each SSC as high-safety-significant or low-safety-significant. The code case would establish revised treatment and less prescriptive and burdensome information collection requirements for safety and non-safety SSCs categorized as performing low-safety-significant functions, but would also add requirements for on-going evaluations to ensure safety standards are maintained and that records of categorization decisions be kept.

Because the information collection requirements for low-safety-significant SSCs would be handled as part of Code Case N-752-2, the information collection burden for these SSCs that was covered by 10 CFR 50.55a(g) (OMB clearance number 3150-0264) would be reduced. No information collection requirements are being changed in that section. The current information

collection requirements and their burden reductions are discussed under "Justification" for that section.

The rule provisions may be used by applicants for a license to be issued under Parts 50 or 52, as well as by holders of operating licenses issued under Parts 50 or 54.

The exact number of facilities affected is uncertain because the information collection is associated with voluntary alternative requirements. The NRC estimates that 10 licensees and applicants will voluntarily choose to adopt Code Case N-752-2.

No changes in burden are being included for applications submitted under Part 52 and covered by OMB clearance number 3150-0151. It is unlikely that applicants for design certifications will use these alternative requirements, as licensees opting to use the design would also need to use the alternative requirements. Furthermore, the small change in burden for addressing one minor subset of requirements versus an alternative set is negligible against the overall burden for submittal of a license application.

## A. JUSTIFICATION

### 1. Need For and Practical Utility of the Collection of Information

Approval of Code Case N-752-2, with conditions specified in the rule, would have the following effects on recordkeeping requirements:

- Section 50.55a(g) incorporates by reference certain requirements of the ASME BPV Code. The ASME BPV Code sets forth requirements to which nuclear power plant components are constructed, tested and inspected. The ASME BPV Code contains information collection requirements that impose a recordkeeping and reporting burden. Code Case N-752-2 would relieve some of the Section 50.55a requirements for licensees who adopt this code case for SSCs that are determined to be of low safety-significance. In particular, requirements for repair/replacement of some components would be revised. Instead of the specific requirements in the Code, the more general requirements of Code Case N-752-2 would apply. As a result, burden reduction is anticipated for recordkeeping requirements associated with some of the Section XI requirements of the Code, for some fraction of components. While the burden from Section 50.55a would be removed, some burden from Code Case N-752-2 would be established in its place. The estimate assumes 80% of the (safety-related) components end up being low safety-significant, and that the reduction in burden is by 90% (that is, the existing Section 50.55a burden would be removed and the Code Case N-752-2 burden imposed instead). This is reflected in the tables at the bottom of this supporting statement.
- The code case specifies how the categorization process is to be conducted. The licensee or applicant would perform valuations of the significance of pressure-retaining

and component support items, considering the consequences of failure of the item, including the direct and indirect effects of failure on both active and passive functions. The process is required to be performed by personnel with expertise in (1) probabilistic risk assessment (PRA), (2) plant operations, (3) system design, and (4) safety or accident analysis. To meet the requirements, a licensee (or applicant) would need to gather information to support preparation of the models (such as the PRA), gather information about the components within the systems, and prepare information about safety-significance. The majority of the estimated burden for this rulemaking is associated with the categorization process preparation and implementation. The NRC expects that implementation would occur over a period of years. When choosing to implement Code Case N-752-2, a licensee can begin to categorize on a system basis or for individual items and take advantage of the reductions in treatment requirements for those items categorized as low-safety-significant. As stated in Code Case N-752-2, records of categorization determinations are required to be prepared and maintained.

- The code case requires that a licensee or applicant define the requirements to control the design, procurement, installation, configuration, and corrective action for low-safety-significant SSCs to confirm reasonable confidence in their capability to perform functions under design basis conditions. The existing more detailed requirements for Section XI programs are being removed as requirements for low-safety-significant SSCs by this rulemaking. Again, these rule requirements would result in a reduction in the level of detail from existing requirements, providing more flexibility to the licensee. While specific records are not identified for retention, licensees will keep some records so that they could show how they comply with this requirement if inspected. Further, it is anticipated that most licensees would need to review their existing processes to determine whether they comply with the specific requirements and make changes to procedures, databases, or other activities as a result. Thus, there will be one-time and annual implementation costs.
- The code case, and the condition specified in RG 1.147, would require the licensee (or applicant) to review changes to the plant, operational practices, and operating experience to update the PRA and SSC categorization no longer than every two refueling outages. This requirement would likely result in a need for a licensee to retain information to be able to perform the required review.

## 2. Agency Use of Information

The licensee or applicant would review changes to the plant, operational practices, applicable plant and industry operational experience, and, as appropriate, update the PRA and categorization and treatment processes. The validity of the categorization process relies on ensuring that the performance and conditions of structures, systems, and components (SSCs) continue to be maintained consistent with applicable assumptions. Categorization records allow the NRC to have the opportunity to confirm that the process is satisfactory.

The NRC uses the records and reports required in this part to ascertain that licensees are properly implementing codes and standards requirements that are important for the adequate protection of the health and safety of the public and the environment. The reports and recordkeeping requirements allow the NRC to review documentation to independently assess compliance with these codes and standards requirements as part of its oversight functions.

3. Reduction of Burden Through Information Technology

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.

The NRC has issued "Guidance for Electronic Submissions to the NRC," which provides directions for the electronic transmission and submittal of documents to the NRC. Electronic transmission and submittal of documents can be accomplished through the following avenues: the Electronic Information Exchange process, which is available from the NRC's "Electronic Submittals" Web page, or by optical storage media (e.g., CD-ROM, DVD), facsimile, or e-mail. The agency estimates that approximately 90-percent of the responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available. There is no duplication of requirements and this information is not collected under another control number.

5. Effort to Reduce Small Business Burden

This proposed rule does not affect any small businesses.

6. Consequences to Federal Program or Policy Activities if the Collection Is Not Conducted or Is Conducted Less Frequently

If the information is not collected, NRC will not be able to assess whether licensees are operating within the specific safety requirements applicable to the licensing and operating activities for existing nuclear power reactors.

The information and required frequency from licensees that seek to license and operate nuclear power reactors is essential to NRC's determination of whether the applicant has adequate designs, equipment, and programs throughout the life of the license to protect the public health and safety.

7. Circumstances Which Justify Variation from OMB Guidelines

There are no variations from Office of Management and Budget (OMB) guidelines.

8. Consultations Outside the NRC

Opportunity for public comment on the information collection requirements has been published in the *Federal Register* as part of the subject rulemaking.

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

Not applicable.

12. Estimated Burden and Burden Hour Cost

The burden from recordkeeping requirements arising from this rulemaking is estimated as shown in the attached tables at the end of this supporting statement. For purposes of this estimate, NRC has used the assumptions used in its most recent information collection request to the Office of Management and Budget for existing regulations, except for those aspects specifically impacted by the rulemaking. The burden estimate, including an estimate of one-time costs, is shown in the attached tables. As noted, the NRC concludes that the effect of the changes on recordkeeping requirements will be a small increase in the current burden, because of the one-time implementation burden, with burden reductions expected in subsequent years because of the application of less prescriptive requirements than those required by 50.55a(g). There is considerable uncertainty in these estimates for a number of reasons: voluntary nature (which affects number of applicants); extent of SSCs that are low-safety-significant (which depends upon plant design); and burden impact (which depends upon events, need for replacement equipment, etc.). Costs for development of PRA and revisions to procedures would also vary depending upon the current state of the licensee's processes. Costs for applicants would be expected to be less since they would not yet have developed the programs and could factor the proposed rule requirements into their process.

While one-time costs will be incurred by the licensee/applicant for development of PRA

and procedures and conducting the categorization, NRC expects cost savings to result from the added flexibility being provided for licensees to apply less prescriptive requirements than those required by 50.55a(g) to some SSCs in using Code Case N-752-2. This savings will be with respect to records, but the vast majority of the savings is expected to result from procurement of equipment at reduced costs and savings in licensee staff hours to implement the lesser treatment requirements for some SSCs, which is not provided in this estimate for recordkeeping burden.

13. Estimate of Other Additional Costs

There are no additional costs.

14. Estimated Annualized Cost to the Federal Government

The staff estimates that there will be no annualized cost to the Federal Government for the conduct of this collection of information.

15. Reasons for Change in Burden or Cost

Overall, the rule is estimated to result in a net reduction in the information collection burden by an estimated 3,590 hours. This burden reduction is associated with the elimination of the 50.55a(g) requirements with the one-time burden cost to prepare and implement the categorization process and regularly review the categorization. Upon voluntary implementation of Code Case N-752-2, a net savings in information collection burden is expected.

16. Publication for Statistical Use

Not applicable.

17. Reason for Not Displaying the Expiration Date

The recordkeeping requirements 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

Not applicable.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

### Annualized recordkeeping burden

| Requirement   | Number of recordkeepers | Burden Hours per recordkeeper | Total annual recordkeeping burden hours | Cost @ \$154/hr    |
|---|-------------------------|-------------------------------|---|--------------------|
| <b>50.55a(g) ISI requirements</b>                                   | 10                      | (655)                         | (6,550)                                 | (\$1,008,700)      |
| <b>Records for Developing and implementing process for LSS SSCs</b> | 10                      | 54                            | 540                                     | \$83,160           |
| <b>Records for Reviewing PRA and SSC categorization</b>             | 10                      | 62                            | 620                                     | \$95,480           |
| <b>Total Recordkeeping Burden</b>                                   |                         |                               | (5,390)                                 | <b>(\$830,060)</b> |

Note: Estimates assume 80% of current safety-related SSCs are low-safety-significant and that burden of substitute requirements is a 90% reduction of existing burden for data collections, depending upon the requirement.

### Annualized one-time recordkeeping burden

| Requirement   | Number of recordkeepers | Burden Hours per recordkeeper | Total annual recordkeeping burden hours | Cost @ \$154/hr  |
|---|-------------------------|-------------------------------|---|------------------|
| <b>Records for Conducting categorization process</b>  | 10                      | 80                            | 800                                     | \$123,200        |
| <b>Records for Developing and implementing process for LSS SSCs, reviewing PRA and SSC categorization</b> | 10                      | 100                           | 1000                                    | \$154,000        |
| <b>Total one-time recordkeeping burden</b>  |                         |                               | 1800                                    | <b>\$277,200</b> |

Note: Estimated cost for review and revision of licensee procedures for treatment practices to implement Code Case N-752-2. Annualized cost for categorization and documentation of basis for decisions under Code Case N-752-2 assumes implementation occurs over 3 years, but the licensee has the option to use a different period.

**Total change in industry recordkeeping burden (reductions shown in parenthesis) –**  
Assumes 10 licensees/applicants (respondents) who decide to implement

| <b>3150-0264 (50.55a)</b>                | <b>Hours</b>   | <b>Dollars (\$154/hr)</b> |
|--|----------------|---------------------------|
| Recurring Annual Recordkeeping Burden    | (5,390)        | (\$830,060)               |
| Annualized One-Time Recordkeeping Burden | 1,800          | \$277,200                 |
| <b>Total Recordkeeping Burden</b>        | <b>(3,590)</b> | <b>(\$552,860)</b>        |