SUPPORTING STATEMENT

FOR

INFORMATION COLLECTIONS CONTAINED IN

APPROVAL OF AMERICAN SOCIETY OF

MECHANICAL ENGINEERS’ CODE CASES

FINAL RULE

10 CFR 50.55a

(RIN-3150-AJ93)

Description of the Information Collection

The U.S. Nuclear Regulatory Commission (NRC) regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a incorporate by reference American Society of Mechanical Engineers (ASME) Codes for nuclear power plants. The NRC is amending the information collection requirements associated with those regulations, as discussed in this supporting statement. The NRC expects a reduction in burden on respondents due to the use of ASME Code Cases, as described below. The use of ASME Code Cases reduces the need for licensees to submit licensing actions for the use of voluntary alternatives to the ASME Code requirements.

The NRC’s regulations in 10 CFR 50.55a incorporate by reference Division 1 rules of Section III, "Rules for Construction of Nuclear Power Plant Components," and Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," of the ASME Boiler and Pressure Vessel (BPV) Code; and the rules of the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM) Code. These rules of the ASME BPV and OM Codes set forth the requirements to which nuclear power plant components are constructed, tested, repaired, and inspected. This rule contains requirements that would result in collections of information that represent a recordkeeping and reporting burden for licensees.

The NRC approves and/or mandates the use of the ASME BPV and OM Codes in 10 CFR 50.55a through the process of incorporation by reference. As such, each provision of the ASME Codes incorporated by reference into, and mandated by, 10 CFR 50.55a constitutes a legally-binding NRC requirement imposed by regulation.

In response to BPV and OM Code user requests, the ASME develops ASME Code Cases that provide voluntary alternatives to ASME BPV and OM Code requirements under certain circumstances. The NRC reviews ASME BPV and OM Code Cases, determines the acceptability of each Code Case, and publishes its findings in NRC Regulatory Guides (RG). The RGs are revised periodically as new Code Cases are published by the ASME. The final rule associated with this supporting statement is the latest in a series of rulemakings that incorporate by reference new versions of the RGs into 10 CFR 50.55a, so they may be used by licensees. The RGs the NRC proposes to incorporate by reference into the regulations are RG 1.84, “Design, Fabrication, and Materials Code Case Acceptability, ASME Section III,” Revision 38; RG 1.147, Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1,” Revision 19; and RG 1.192, “Operation and Maintenance Code Acceptability, ASME OM Code,” Revision 3. These revisions supersede the incorporation by reference of RG 1.84, Revision 37; RG 1.147, Revision 18; and RG 1.192, Revision 2.

The NRC determined that this regulatory action would improve the effectiveness of future licensing actions. This final action would allow licensees to apply the ASME Code Cases listed in the RGs as voluntary alternatives to requirements in the ASME BPV Code and ASME OM Code for the design, construction, inservice inspection, and inservice testing of nuclear power plant components without a request for the use of alternatives or an exemption. This would help ensure that NRC actions are effective, efficient, realistic, and timely by eliminating the need for the NRC review of plant specific requests for alternatives in accordance with 10 CFR 50.55a(z).

The final rule will result in a reduction in information collection burden due to a reduced number of alternative requests from industry to the NRC as described in this supporting statement.

1. JUSTIFICATION
2. Need For and Practical Utility of the Collection of Information

Section 50.55a(z) allows applicants to use alternatives to the requirements of 10 CFR 50.55a paragraphs (b) through (h) when authorized by the NRC. Alternatives are voluntarily submitted by licensees under § 50.55a(z) and are estimated to take 380 hours to prepare and submit. Section 50.55a(z) is an existing requirement that was previously located at 10 CFR 50.55a(a)(3) prior to 2014.

The final rule incorporates by reference new Code Cases developed by the American Society of Mechanical Engineers (ASME). Code Cases developed by the ASME are voluntary alternatives to requirements of the ASME BPV and OM Code and often reflect improvements in technology, new information or improved procedures. Licensee development of alternative request applications and obtaining NRC approval prior to using these Code Cases is burdensome to the licensee.

The approval of ASME Code Cases in the latest revisions of three previously incorporated RGs would reduce the number of alternative requests submitted by licensees under 10 CFR 50.55a(z), because use of these Code Cases will be permitted without the need for submission of an alternative request.

1. Agency Use of Information

The records are generally historical in nature and provide data on which future activities can be based. The practical utility of the information collection for NRC is that appropriate records are available for auditing by NRC personnel to determine licensees and applicants use of the Code Cases listed in the regulatory guides as voluntary alternatives to engineering standards for the construction, inservice inspection, and inservice testing of nuclear power plant components

1. 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 to them.

The NRC has issued [*Guidance for Electronic Submissions to the NRC*](http://www.nrc.gov/site-help/electronic-sub-ref-mat.html)*,* 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 approximately 15%of the responses are filed electronically.

1. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available. There is no duplication of requirements. The NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

1. Effort to Reduce Small Business Burden

No small businesses are affected by this final rule.

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

If the NRC did not periodically update and incorporate by reference the RGs’ listing of acceptable, conditionally acceptable, or unacceptable new Code Cases, licensees would be obligated to use the alternative request process if they wanted to use new ASME approved Code Cases. This process would be more burdensome on both the licensee and the NRC.

1. Circumstances Which Justify Variation from OMB Guidelines

There are no variations from OMB guidelines.

1. Consultations Outside the NRC

Opportunity for public comment on the information collection requirements was published in the *Federal Register* on August 16, 2018 (83 FR 40685). The NRC received five comment submissions on the proposed rule and draft RGs, for a total of 20 comments. The NRC reviewed every comment submission and identified 12 unique comments requiring the NRC’s consideration and response. A full summary of comments and the NRC’s responses are presented in Section IV, “Public Comment Analysis,” of the final rule *Federal Register* notice.

Some of the public comments were related to the recordkeeping and reporting requirement, however, they did not affect the burden estimate. An overview of these comments and the NRC response is as follows:

*REGULATORY GUIDE 1.147, REVISION 19 (DG-1342)*

The commenter stated that the discussion of the condition as found in the Federal Register Vol. 83, No. 159, focused mainly on dissimilar metal welds (DMW) whereas the condition defined in DG-1342 applies to the coordinated implementation of Supplements 2, 3, & 10 from the ID surface. As written the proposed condition on Code Case N-696-1 would require examiners qualified to depth size flaws in ferritic and austenitic welds, from the ID surface, to report flaws greater than 50 percent through wall as having an indeterminate depth, which is inconsistent with discussion included in the Federal Register Vol. 83, No. 159, and in the regulatory analysis for the proposed rule. The NRC agrees with the comment and the condition on N-696-1 in RG 1.147 has been revised to clarify the weld types to which the condition applies.

*Code Case N-702 Alternative Requirements for Boiling Water Reactor (BWR) Nozzle Inner Radius and Nozzle-to-Shell Welds, Section XI, Division 1*

The proposed conditions on Code Case N-702 state, in part, that “The use of Code Case N-702 in the period of extended operation is prohibited.” Two comment submissions suggest that the proposed condition be revised to provide better guidance to licensees on how this case may be used during the period of extended operation, rather than to simply prohibit its use. The NRC disagrees with the comment. No change was made to this final rule as a result of this comment.

1. Payment or Gift to Respondents

Not applicable.

1. 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.

1. Justification for Sensitive Questions

Not applicable.

1. Estimated Burden and Burden Hour Cost

This final rule allows licensees to apply the Code Cases listed in the RGs as voluntary alternatives to requirements in the ASME BPV Code and ASME OM Code without a request for the use of an alternative or an exemption. The NRC estimates that this action will result in a reduction in the number of plant specific requests for alternatives in accordance with 10 CFR 50.55a(z), because licensees can use alternatives such as ASME approved new Code Cases incorporated by reference in 10 CFR 50.55a without seeking NRC’s prior approval.

A review of past Code Case alternative request submittals has determined that plant owners submit a Code Case alternative request that covers multiple units and multiple plant sites. Based on annual code case relief request submissions before and after ASME final rules are published, the staff estimated that if the final rule is not adopted, operating sites would submit 24 relief requests annually for the Code Cases in this final rule.

The incorporation by reference of recent Code Cases will allow these Code Cases to be implemented without incurring any burden for preparation of an alternative request under 10 CFR 50.55a(z). Each request for alternatives is estimated to take 380 hours; therefore, the resulting reduction in licensee burden is 9,120 hours (24 requests x 380 hours per request) and 24 responses annually, a savings of $2,535,360 (9,120 hours x $278/hr). There is a decrease in annualized recordkeeping burden due to the reduction in alternative and relief requests. The annualized recordkeeping burden is estimated to decrease by 240 hours ($66,720).

The burden estimates are shown in Table 1 and 2 on page 8 of the supporting statement.

The $278 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 2019 (84 FR 22331, May 17, 2019).

1. Estimate of Other Additional Costs

There are no additional costs.

1. 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.

As a result of the final action, the NRC would review 24 fewer requests for alternatives annually. The NRC estimates that reviewing these requests takes an average of 143 hours per request. As a result, the NRC estimates that the incorporation by reference of new Code Cases will result in a savings of $954,096 (143 hrs/relief request x 24 requests x $278/hr). The burden estimate is shown in Table 3 on page 9 of the supporting statement.

The current annualized cost to the Federal government for Part 50 is $65,369,702.  The total annualized cost to the government for Part 50 will be $65,369,702 - $954,096 = $64,415,606.

1. Reasons for Change in Burden or Cost

The final rule would decrease the burden for 10 CFR Part 50 from 3,731,355 hours and 43,678 responses to 3,722,235 hours and 43,654 responses, a reduction of 9,120 hours and 24 responses.

The final rule reduces burden by incorporating by reference recent ASME Code Cases. As a result of this incorporation by reference, burden on licensees to submit requests for alternatives under 10 CFR 50.55a(z) will be reduced. Licensees will no longer need to submit alternative requests in order to use these Code Cases, once they are included in NRC’s Regulatory Guides. A recent review of Code alternative requests submitted to the NRC over a 5-year span identified that submittals ranged from a few pages to several hundred pages with an average of approximately 32 pages with average technical complexity. Therefore, the NRC estimates that an alternative request submittal requires an average of 300 hours of effort to develop the technical justification and an additional 80 hours to perform research, review, approve, process, and submit the document to the NRC for use of alternatives under 10 CFR 50.55a(z). Therefore, the total estimated burden is determined to be 380 hours per alternative.

1. Publication for Statistical Use

Not applicable.

1. Reason for Not Displaying the Expiration Date

The recordkeeping and reporting 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.

1. Exceptions to the Certification Statement

Not applicable.

1. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

TABLE 1

ANNUALIZED RECURRING REPORTING BURDEN

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Information Collection Section | Number of Respondents | Number of Responses per respondent | Number of Responses | Burden Hours per Response | Total Reporting Burden (Hrs.) | Cost @ $278/hr. |
| **50.55a(z)**Averted Alternative Requests submitted by power reactor plants | 24 | -1 | -24 | 380 | -9120 | -$ 2,535,360 |

TABLE 2

ANNUALIZED RECURRING RECORDKEEPING BURDEN

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Information Collection Section | Number of Recordkeepers | Number of Records per Recordkeeper | Number of Records | Burden Hours per Record | Total Recordkeeping Burden (Hrs.) | Cost @ $278/hr. |
| **10 CFR 50.55a(z)**Records for Code Alternative Request preparation and submission | 24 | -1 | -24 | 10 | -240 | -$66,720 |

Total Industry Burden Hours -$9,360

 Total Industry Burden Hour Cost -$2,602,080

Annual Potential Respondents 24

 Responses -24

TABLE 3

ANNUALIZED RECURRING NRC REVIEW BURDEN

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Information Collection Section | Number of Respondents | Number of Responses per respondent | Number of Responses | Burden Hours per Response | Total Annual Reporting Burden (Hrs.) | Cost @ $278/hr. |
| **10 CFR 50.55a(z)**Averted reviews of Code Alternative Requests | 24 | -1 | -24 | 143 | -3,432 | -954,096 |

Total NRC Burden Hours -3,432

Total NRC Burden Hour Cost -$954,096