

# Request for OMB Review

DESIGNATED ORIGINAL

PDR  
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### Important

Read instructions before completing form. Do not use the same SF 83 to request both an Executive Order 12291 review and approval under the Paperwork Reduction Act.

Answer all questions in Part I. If this request is for review under E.O. 12291, complete Part II and sign the regulatory certification. If this request is for approval under the Paperwork Reduction Act and 5 CFR 1320, skip Part II, complete Part III and sign the paperwork certification.

Send three copies of this form, the material to be reviewed, and for paperwork—three copies of the supporting statement, to:

Office of Information and Regulatory Affairs  
Office of Management and Budget  
Attention: Docket Library, Room 3201  
Washington, DC 20503

### PART I.—Complete This Part for All Requests.

1. Department/agency and Bureau/office originating request U. S. Nuclear Regulatory Commission	2. Agency code 3 1 5 0
3. Name of person who can best answer questions regarding this request Joe Mate	Telephone number ( 301 ) 504-1109
4. Title of information collection or rulemaking 10 CFR 54, Requirements for Renewal of Operating Licenses for Nuclear Power Plants	
5. Legal authority for information collection or rule (cite United States Code, Public Law, or Executive Order) 42 USC 2201(o), or	

6. Affected public (check all that apply)

1 <input type="checkbox"/> Individuals or households	3 <input type="checkbox"/> Farms	5 <input type="checkbox"/> Federal agencies or employees
2 <input type="checkbox"/> State or local governments	4 <input checked="" type="checkbox"/> Businesses or other for-profit	6 <input type="checkbox"/> Non-profit institutions
		7 <input type="checkbox"/> Small businesses or organizations

### PART II.—Complete This Part Only if the Request is for OMB Review Under Executive Order 12291

7. Regulation Identifier Number (RIN)  
\_\_\_\_\_, or, None assigned

8. Type of submission (check one in each category)

<b>Classification</b>	<b>Stage of development</b>	<b>Type of review requested</b>
1 <input type="checkbox"/> Major	1 <input type="checkbox"/> Proposed or draft	1 <input type="checkbox"/> Standard
2 <input type="checkbox"/> Nonmajor	2 <input type="checkbox"/> Final or interim final, with prior proposal	2 <input type="checkbox"/> Pending
	3 <input type="checkbox"/> Final or interim final, without prior proposal	3 <input type="checkbox"/> Emergency
		4 <input type="checkbox"/> Statutory or judicial deadline

9. CFR section affected  
\_\_\_\_\_ CFR \_\_\_\_\_

10. Does this regulation contain reporting or recordkeeping requirements that require OMB approval under the Paperwork Reduction Act and 5 CFR 1320?  Yes  No

11. If a major rule, is there a regulatory impact analysis attached?  Yes  No  
If "No," did OMB waive the analysis?  Yes  No

### Certification for Regulatory Submissions

In submitting this request for OMB review, the authorized regulatory contact and the program official certify that the requirements of E.O. 12291 and any applicable policy directives have been complied with.

Signature of program official:	Date
Signature of authorized regulatory contact	Date

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12. (OMB use only)

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OMB SUPPORTING STATEMENT FOR 10 CFR PART 54

PROPOSED AMENDMENT TO THE NUCLEAR POWER PLANT LICENSE RENEWAL RULE

OMB CLEARANCE No. (3150-0155)

DESCRIPTION OF THE INFORMATION COLLECTION

The Atomic Energy Act, which permits the renewal of licenses, does not contain specific procedures, criteria, and standards that must be satisfied in order to renew a nuclear power plant license. The license renewal rule (10 CFR Part 54), completed in 1991, established procedures, criteria, and standards governing nuclear power plant license renewal, including information submittal and recordkeeping requirements. However, many of the details of the current rule are not clear with respect to requirements and procedures. Difficulties with this rule were uncovered in working with the industry in trying to implement the rule. As a result of these difficulties, 10 CFR Part 54 is being revised. The proposed rule is intended to correct the difficulties identified in the current version of the rule. In addition, the proposed rule will also result in a reduction in the workload of the licensee since some of the requirements identified in the current rule have been eliminated from the proposed rule.

The changes in information collection requirements between the current rule and the proposed rule are included in "Need for the Collection of Information."

A. JUSTIFICATION

1. Need for the Collection of Information

The regulatory philosophy underlying the proposed amendment to the nuclear power plant license renewal rule is founded on two key principles. The first principle of license renewal is that, with the possible exception of the detrimental effects of aging on the functionality of certain systems, structures, and components, and possibly some few other issues related to safety only during the period of extended operation, the regulatory process is adequate to ensure that the licensing bases of all currently operating plants provide and maintain an acceptable level of safety so that operation will not be harmful to the public health and safety or the common defense and security. Modifying the regulatory process for the period of extended operation to include the management of the detrimental effects of aging on the functionality of certain systems, structures, and components ensures that the licensing bases will provide and maintain an acceptable level of safety. The proposed rule focuses the Commission's review of this one safety issue but provides leeway for the Commission to consider, on a case-by-case basis, other issues unique to the period of extended operation.

The second and equally important principle is that each plant's current licensing basis (CLB) must be maintained during the renewal term, in part through a program of age-related degradation management for certain systems, structures, and components as defined in the proposed rule amendment.

In order to determine the necessary actions that are needed to constitute aging management programs, licensees applying for license renewal will be required to perform an integrated plant assessment (IPA) directed to that purpose. In this assessment, systems, structures, and components that are within the scope of license renewal are identified and screened to determine which structures and components require actions to manage the detrimental effects of age-related degradation. The required aging management actions are then identified, described, and justified. The applicant will be required to report in its application the screening methods used, the list of structures and components requiring aging management for the period of extended operation resulting from the screening, and the aging management actions that have been or will be taken, together with their bases. The NRC will review the application to determine the adequacy of the licensee actions taken and to be taken, as a basis for approval or denial of a renewed license. The inspection, surveillance, testing, and maintenance actions involved in the aging management program will include the requirement for recordkeeping and availability of those records to the NRC for review or audit as part of the NRC's regulatory oversight programs.

Changes in the information collection requirements between the current rule in 10 CFR Part 54 and the proposed rule amendment are identified below.

**10 CFR 54.21 - Contents of Application - Technical Information.** This section currently requires applicants for license renewal to provide the entire license renewal application, with all its lists and analysis, in the Final Safety Analysis Report (FSAR). The proposed rule amendment does not require the entire application to be contained in the FSAR. However, an FSAR supplement will be required as discussed in §54.21(d) below.

**10 CFR 54.21(a) - Integrated Plant Assessment.** The IPA has been simplified. The requirement to provide a list of systems, structures, and components that are within the scope of license renewal, as defined by the rule, has been deleted. The type and number of structures and components that are subject to aging management review have been greatly reduced. The IPA now focuses on aging management to ensure functionality of long-lived, passive structures and components whose failure would directly result in a loss of intended system or structure function during the period of extended operation. The information constituting this assessment includes:

- A description and justification of the methods used to identify those structures and components that require aging management review and a list of these structures and components. The NRC needs this information to be able to conclude that additional aging management attention is directed to structures and components that require it because they are important and may undergo age-related degradation that is new or different or not previously evaluated for the renewal term.

- Demonstration of adequacy of actions taken or to be taken to manage the detrimental effects of age-related degradation on functionality. The NRC needs this information to be satisfied that the actions will be effective in assuring the continued safe operation of the plant.

10 CFR 54.21(b) - CLB Changes. The requirement to identify any changes to the CLB has been deleted because existing CLB controls are considered adequate. These changes are discussed under Sections 54.21 (a) and (c).

10 CFR 54.21(c)(1) - Time-limited Aging Analysis. This section is new. An applicant must provide a list of time-limited aging analyses for systems, structures, and components that conform to the definition provided in section 54.3 and a demonstration that the analyses have been extended to the end of the renewal term. This section has been added to clarify issues previously included within the concept of age-related degradation unique to license renewal.

10 CFR 54.21(c)(2) - Exemptions. This section has been combined with time-limited aging analysis which is discussed above. The requirement to review relief from standards and codes has been deleted since the current process for handling reliefs is considered adequate.

10 CFR 54.21(d) - Plant Modifications. The requirement to identify any plant modifications has been deleted. Plant modifications are adequately covered under 54.21(a) and (c).

10 CFR 54.21(d) - FSAR Supplement. This new section was added to conform with a separate application and FSAR report. An applicant would no longer be required to include the entire application in the FSAR because information is now provided in a separate application; however, an applicant would be required to provide a summary of the IPA and the time-limited aging analysis review in an FSAR supplement at the time the application is submitted.

The totality of the information required under §54.21 is needed by the NRC to determine whether the actions taken or to be taken by the applicant with respect to the detrimental effects of aging on the functionality of certain systems, structures, and components provide reasonable assurance that the facility's operations during the period of extended operation can be conducted in accordance with the current licensing basis.



10 CFR 54.22 - Contents of Application - Technical Specifications. This change limits the technical specification changes to be included in the renewal application to only those changes that are necessary to manage the effects of aging during the period of extended operation. The NRC needs this information to determine the acceptability of these changes from the pertinent safety standpoint.

10 CFR 54.33(d) - Maintenance of Programs and Procedures. This section has been deleted from the rule because the necessary change controls are satisfactorily accomplished by existing requirements in 10 CFR 50.59.

10 CFR 54.37(a) - Additional Records and Recordkeeping Requirements. This section establishes retention and update requirements.

10 CFR 54.37(b) - FSAR Updates. This section required licensees to periodically report any system, structure, and component newly identified as important to license renewal. The list of systems, structures, and components important to license renewal is no longer required to be part of the FSAR supplement for license renewal. As such, the requirement has been deleted for any system, structure, or component newly identified as important to license renewal or deleted as no longer important to license renewal after the issuance of the renewal license to be identified in the FSAR Update. 10 CFR 50.71 already requires that FSARs be periodically updated. Hence, to require an additional update would be duplicative in nature.

Under the proposed rule amendment, a licensee will have to report in the FSAR Update any newly identified structure or component that is subject to detailed review in accordance with 10 CFR 54.21(a)(1). The FSAR Update contains information on all of the changes made by the licensee to the plant since the original FSAR was submitted or, as appropriate, since the last FSAR was submitted.

10 CFR 54.37(c) - The annual submission of a report on program changes by the licensee and maintenance of supporting documentation was deleted from the rule because the necessary change controls are accomplished by existing requirements in 10 CFR 50.71.

## 2. Use of the Information

The information will be used by the applicants for and holders of renewed nuclear power plant operating licenses as a basis for the establishment and conduct of their aging management programs and by the NRC in its regulatory oversight required by the agency's statutory responsibility to require reasonable assurance that the continued operation of the nuclear power plants during the renewal term will continue to provide reasonable assurance of the adequate protection of the public health and safety and the common defense and security.

3. Reduction of Burden Through Information Technology

There is no legal obstacle or any obstacle in the proposed rule to licensees reducing the burden associated with this information collection by use of information technology or otherwise. The proposed rule amendment does not prescribe the methods for the screening steps or for the conduct of the aging management activities. Rather, the applicants and licensees would develop their own methods and programs and describe them for NRC review.

4. Identification and Avoidance of Duplication

The proposed rule amendment requires that the license renewal applicant identify and list those structures and components that require aging management review and to limit new aging management actions to these structures and components for the period of extended operation only. The proposed rule amendment does not impose new requirements with respect to aging management for structures and components that the Commission has concluded are already being effectively managed for the detrimental effects of aging on the functionality of this equipment. The information requested in the proposed rule will not duplicate information currently submitted to the NRC.

5. Effort to Use Similar Information

License renewal for nuclear power plants is a new activity. The information collection requirements of the proposed rule amendment are limited to the specific needs of license renewal. Similar information is not available, except as noted under A4 above for equipment aging management programs already established. The currently available information for such programs would be used under the proposed rule amendment.

6. Effort to Reduce Small Business Burden

The proposed rule amendment, if promulgated, will not have a significant economic impact upon a substantial number of small entities. The rule would affect only nuclear power plant licensees that choose to pursue license renewal. Companies that own these plants do not fall within the definition of "small entities."

7. Consequences of Less Frequent Collection

The records generated as a result of the amended license renewal rule would partly be provided at the time of application for renewal (e.g., IPA) and partly made available on a continual basis during the period of extended operation. Reporting of information is required only as identified under A1, above. Specified updates are required and are sufficient in lieu of continual updates (FSAR Updates). Less frequent collection would increase the risk that programs for age-related degradation management would not be sufficiently current to ensure maintenance of the CLB during the period of extended operation.

8. Circumstances That Justify Variation from OMB Guidelines

The recordkeeping requirements of the proposed license renewal rule exceed OMB's requirements by mandating that records be kept for the duration of the renewed license. A retention period for the full term of the renewed license is necessary to ensure that data are available for establishing equipment aging trends.

9. Consultations Outside the NRC

A public workshop was held on September 30, 1993, in Bethesda, Maryland to evaluate alternative approaches on how to best take advantage of existing licensee programs and activities as a basis for concluding that aging will be addressed in an acceptable manner consistent with the fundamental principles of license renewal during the period of extended operation. Over 180 persons attended the workshop and provided comments on the various approaches. Representatives from the nuclear industry, engineering and consulting firms, Federal and State governments, public interest groups, and individual citizens attended the workshop. The information received at the workshop, including the issues raised, as well as the written comments submitted after the workshop, were considered in the development of the proposed rule amendments. The proposed rule will be published in the Federal Register for public comment.

10. Confidentiality of Information

None except for proprietary information which would be handled in accordance with 10 CFR 2.790 of NRC's regulations.

11. Sensitive Questions

None.

12. Estimate of Industry Burden

It is anticipated that the paperwork burden will vary widely among nuclear power plant licensees. As licensees learn more about age-related degradation management, the burden on licensees will likely be reduced. All nuclear plants are somewhat different and the programs employed by individual plants, while similar, are not exactly the same. Nevertheless, it has been estimated that, on average, under the proposed rule each licensee who submits an application for license renewal will incur approximately 94,000 staff-hours of paperwork burden to satisfy NRC's review requirements. Of this amount, approximately 64,000 staff-hours are attributed to one-time implementation actions (reporting) and the remainder, 30,000 hours, represents a recurring annual recordkeeping burden. This recordkeeping burden when considered over an assumed 30-year period from the time of application submittal to the end of the renewal term, amounts to about 1,000 staff-hours per year. These estimates capture the licensee's engineering and management licensing reviews, and clerical activities identified in the 10 CFR Part 54



rulemaking. During the initial 3-year OMB clearance, the average annual burden would be about 21,500 hours and 1,000 hours annually per licensee thereafter. It is estimated that the NRC will review 3 to 4 license renewal applications per year.

The burden estimates incurred under the current rule in effect today for each licensee submitting an application for a license renewal is about 135,000 staff-hours. Of this amount approximately 85,000 staff-hours are attributed to one-time implementation actions and the remainder, 50,000 staff-hours, represents a recurrent annual recordkeeping requirement.

The proposed rule substantially reduces the burden on the licensees because under the proposed rule, licensees would be given credit for those current programs in effect to manage the effects of age-related degradation.

Almost the entire paperwork burden stems from §54.21, which specifies the technical information requirements for the application. It should be noted that §54.17 (not changed by the proposed amended rule), which requires filing of a license renewal application, imposes a burden only indirectly, through §54.19, §54.21, §54.22, and §54.23, which specify the contents of the application.

The burden imposed by §54.19 (not changed by the proposed amended rule), which specifies the general information requirements in the content of the application, imposes a burden that is minimal in comparison with the technical information burden, partly because the scope of the information required is limited but mainly because §54.19 permits -- and would largely result in -- incorporation by reference to existing documents.

The burden imposed by §54.22, Technical Specifications, limits the technical specification changes to those changes necessary to manage the effects of aging during the period of extended operation.

The environmental information burden resulting from §54.23 is not included in this burden estimate. Rather, it will be included in the burden estimate that will accompany a forthcoming proposed rule change for 10 CFR Part 51, which will specify criteria for bounding and limiting the environmental information requirements with the likely effect of reducing the burden to less than what would be required under the existing 10 CFR Part 51.

10 CFR 54.29, the standards for issuance of a renewed license, have been changed from the identification of aging mechanisms to refocus the license renewal review on the adverse effects of aging and functionality of systems, structures, and components, and any time-limited aging analysis issues. This is to insure that important systems, structures, and components will continue to perform their intended function during the period of extended operation.

10 CFR 54.33, the continuation of current licensing basis and conditions of renewed licenses, has been changed to delete all reference to age-related degradation unique to license renewal. It is now concerned with ensuring that systems, structures, and components subject to review will continue to perform their intended function for the extended period of operation. This is a conforming change.

10 CFR 54.37 requires recordkeeping in auditable and retrievable form for certain information that must be reported or recorded pursuant to §54.19, §54.21, §54.22, and §54.23. The requirement for licensees to periodically submit a list of all changes made to programs for the management of age-related degradation unique to license renewal has been deleted because the necessary reporting requirements are accomplished by other existing requirements in §50.71. Accordingly, the paperwork burden of §54.37 can be regarded as part of the paperwork burden of §54.19, §54.21, §54.22, and §54.23, (mainly §54.21).

13. Estimate of Cost to the Federal Government

The NRC paperwork burden related to the new requirements specified in the nuclear power plant license renewal rule is estimated to be about 45,000 staff-hours per nuclear power reactor. Of this amount, about 7,300 staff-hours are expected to be incurred as part of the review of the licensee's application submittal. These are up-front labor expenditures. The balance of the NRC's estimated effort, about 38,000 staff-hours, will be incurred on a continuing basis starting as soon as the renewed license is granted and continuing to the end of the license renewal term. This equates to an annual labor burden of roughly 1,300 staff-hours per reactor. This effort would be expended to review licensees' ongoing aging assessments and aging management activities.

The staff estimates that the NRC's cost burden to review a licensee's application for license renewal will be about \$965,000 per reactor in up-front expenditures. In addition, the annual cost incurred over the term of a 30-year renewed license is estimated to be about \$170,000 per reactor. These costs are based on a fully burdened NRC labor rate of \$132 per staff-hour. The total average cost per license renewal is therefore \$1,135,000. Total annual costs for all licensees cannot be accurately projected because licensees have the option of renewing their licenses for any period of time they choose up to 20 years. There is no minimum period of time for a license renewal. Costs provided are based on a 20-year renewal. These costs are fully recoverable through fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 171.

14. Changes in Burden

The current rule estimated the burden to each licensee seeking a license renewal at 135,000 staff-hours. Because the proposed rule eliminates or reduces licensee requirements, the revised burden under the proposed rule is 94,000 staff-hours. Implementation of the proposed rule is expected to result in a burden reduction of 41,000 staff-hours per license renewal application.

15. Publication for Statistical Use

None.

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

None. Statistical methods are not employed in 10 CFR Part 54 of the information collection provisions.

U.S. NUCLEAR REGULATORY COMMISSION

Documents Containing Reporting or Recordkeeping Requirements:

Office of Management and Budget (OMB) Review

AGENCY: U.S. Nuclear Regulatory Commission (NRC)

ACTION: Notice of the OMB review of information collection

SUMMARY: The NRC has recently submitted to the OMB for review the following proposal for the collection of information under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. Chapter 35).

1. Type of submission, new, revision, or extension: Revision.
2. The title of the information collection: Proposed Rule, 10 CFR Part 54, "Nuclear Power Plant License Renewal."
3. The form number if applicable: Not applicable.
4. How often collection is required: One-time submission with application for renewal of an operating license for a nuclear power plant and occasional collections for holders of renewed licenses.

5. Who will be required or requested to report: Commercial nuclear power plant licensees who wish to renew their operating licenses.
6. An estimate of the number of responses: As many as 100 licensees may take advantage of this provision over the next 30 years. It is anticipated that three or four responses will be received on average each year.
7. An estimate of the total number of hours needed to complete this requirement: The estimated burden on the licensee is being reduced from approximately 135,000 hours to 94,000 hours per license renewal.
8. An indication of whether Section 3504(h), Pub. L. 96-511 applies: Applicable
9. Abstract: The license renewal rule (10 CFR Part 54) which was completed in December 1991, established procedures, criteria, and standards governing nuclear power plant license renewal, including information submittal and recordkeeping requirements. However, many of the details of the current rule are not clear with respect to requirements and procedures. The proposed rule amendment clarifies the requirements, eliminates unnecessary terminology, and simplifies the Integrated Plant Assessment to focus only on those passive, long-lived, nonredundant structures and components, whose



functionality is not easily verified through performance or condition monitoring.

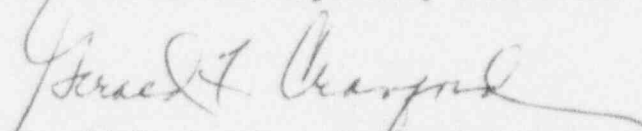
Copies of the submittal can be inspected or obtained for a fee from the NRC Public Document Room, 2120 L Street, NW, Lower Level, Washington, DC 20037.

Comments and questions should be directed by mail to the OMB reviewer:

Troy Hiller  
Office of Information and Regulatory Affairs  
(3150-0155), NE08-3019  
Office of Management and Budget  
Washington, DC 20503

Comments can also be submitted by telephone at (202) 395-3084. The NRC Clearance Officer is Brenda J. Shelton, (301) 415-7232. Dated at Rockville, Maryland, this <sup>27<sup>th</sup></sup> day of *June*, 1994.

For the Nuclear Regulatory Commission



Gerald F. Cranford, Designated  
Senior Official for Information  
Resources Management