# RULEMAKING ISSUE NOTATION VOTE

April 19, 2002 SECY-02-0068

FOR: The Commissioners

FROM: William D. Travers

**Executive Director for Operations** 

SUBJECT: PROPOSED RULE ON FINANCIAL INFORMATION REQUIREMENTS FOR

APPLICATIONS TO RENEW OR EXTEND THE TERM OF AN OPERATING

LICENSE FOR A POWER REACTOR

#### PURPOSE:

To obtain Commission approval to publish a proposed rule. The rule sets forth the bases for the Commission's determination that a financial qualifications review is not necessary for licensees who do not meet NRC's definition of "electric utility" and who are applying for license renewal; adopts a provision to address the potential gap in the financial qualifications regulations for non-electric-utility entities; and removes the requirement in 10 CFR 50.33(f)(2) that non-electric-utility entities submit financial qualification information in their Part 54 renewal applications. The proposed rule would add a new Section 50.76, a requirement segregated from 10 CFR 50.33(f)(2), that would require licensees who are transitioning from an electric utility to a non-electric-utility without going through license transfers to submit financial information. The proposed rule retains the financial qualifications requirements for applicants that wish to renew or extend their licenses for nonpower reactors.

#### **BACKGROUND**:

Section 182.a. of the Atomic Energy Act of 1954, as amended (AEA), requires each application for a license to include information necessary for the Commission to decide the "financial qualifications" of the applicant. Under 10 CFR 50.33(f)(2) an entity other than an electric utility that seeks to renew its operating license for a nuclear power plant must submit the same financial information in its application that is required for an application for an initial license. This provision, adopted in 1984 (49 FR 35747), was based upon the premise that the ratemaking process ensures that an applicant that is an electric utility will have funds to operate the plant safely.

CONTACT: George Mencinsky, NRR/DRIP/RPRP

301-415-3093

On December 13,1991 (56 FR 64943), the Commission adopted the License Renewal Rule, 10 CFR Part 54, which established the requirements for an applicant seeking to renew a nuclear power plant operating license. Part 54 identifies the information that licensees must submit to the NRC for review, and describes the standards for issuing a renewed license, see 10 CFR 54.29. The standards for issuance of a renewed license do not include making a finding with respect to financial qualifications.

The statement of considerations (SOC) for the 1991 rule stated that the basis of the 1984 rulemaking for waiving a financial qualifications review for electric utilities applies not only to the term of the operating license but to the period of extended operation covered by a renewed license. The 1991 rule left unchanged the 10 CFR 50.33(f)(2) requirement that license renewal applicants that are not electric utilities submit financial qualifications information in their renewal applications, and extended the 1984 rule's finding to applicants for renewal of operating licenses. The revision to Part 54 published on May 8, 1995 (60 FR 22461), did not amend this requirement. Thus, while non-electric-utility entities are required to submit financial qualifications information, there is no requirement for a finding of financial qualifications for non-electric-utility entities, and no basis for the lack of such a finding requirement.

Since the 1995 rulemaking, the NRC has received numerous requests for license renewals and has granted eight renewed licenses for four plant sites to electric utilities. However, because of ongoing deregulation in the power market, new entities other than electric utilities may be created to become licensees of nuclear power plants. Some of these entities may decide to renew their licenses. Under the current rule they would be required to submit financial qualifications information under 10 CFR 50.33(f)(2). Moreover, despite the language of Section 54.29, the Commission must make a case-by-case finding of financial qualifications.

Such a case-by-case determination would be resource-intensive and may result in delays in approving renewal applications. The staff has reviewed the license transfer process to determine if there was a basis in the regulatory process that would obviate the need for such a finding at license renewal. The staff determined that, with one exception, the NRC does not need the financial qualifications information from license renewal applicants that are not electric utilities since the NRC can obtain and track financial qualifications information from the licensees through means other than the license renewal process. The exception is the potential gap in the financial qualifications regulation for non-electric-utility entities when a licensee transitions from an electric utility to an entity other than an electric utility without transferring its license. Although almost all utilities transfer to non-utility status with a license transfer, this regulatory gap, if not closed, would prevent the NRC from making a generic determination that financial qualifications review is unnecessary at license renewal. Therefore, the staff proposes to adopt a provision to close the gap in this proposed rule.

On November 30, 2000, the staff provided SECY-00-0225, containing the proposed rulemaking plan to the Commissioners. On March 14, 2001, the staff provided supplemental information on the proposed rulemaking plan to the Commissioners. An April 13, 2001, staff requirements memorandum directed the staff to proceed with the rulemaking.

#### **DISCUSSION**:

Section 50.33(f) requires that applicants for initial operating licenses and renewal of operating licenses submit financial qualifications information, except applicants for and holders of operating licenses for nuclear power reactors that are electric utilities. Section 50.33(f)(2) requires that an entity other than an electric utility that seeks to renew its operating license for a nuclear power plant submit the same financial information in its application that is required for an application for an initial license. However, the provisions in the License Renewal rule, 10 CFR Part 54, is mainly concerned with the technical and administrative requirements for license renewal.

The staff does not believe that the license renewal process, in and of itself, is sufficiently unique to warrant a separate financial review at the time of the renewal application. Other financial qualifications review processes are available if the need arises. The NRC performs financial qualifications reviews at the time of initial licensing and also when holders of nuclear power plant operating licenses apply for transfers of operating licenses. These reviews are more rigorous for applicants that are not electric utilities. Additionally, the timing of an impending license transfer allows the NRC to evaluate the financial qualifications of a proposed transferee with reasonable assurance that the financial information will remain relevant for some period after the license transfer occurs. Finally, 10 CFR 50.33(f)(4) allows ad hoc reviews when circumstances warrant. The staff believes that the current regulatory structure is sufficiently flexible to address unforeseen events that may trigger a review of power reactor licensee financial qualifications.

However, in certain situations, a licensee may transition from an electric utility to an entity other than an electric utility outside the license transfer process under 10 CFR 50.80. The staff proposes to create a new requirement in 10 CFR 50.76, "Licensee's change of status; financial qualifications," requiring an electric utility becoming an entity other than an electric utility without a license transfer to provide the same financial information as is required for obtaining an initial license.

It should be noted that the staff relies on the requirement in 10 CFR 50.33(f)(2) to obtain financial qualifications information on applicants seeking renewal of nonpower reactor operating licenses. The license renewal process for nonpower reactors, unlike the license renewal process for power reactors, includes a financial qualifications review. The staff does not propose to amend this requirement.

The NRC believes this proposed rule would maintain safety while reducing unnecessary regulatory burden.

#### **RESOURCES**:

The estimated resources necessary for this action are 0.75 FTE in FY 2002 and 0.25 FTE in FY 2003 for NRR and \$40,000 for contractor support in FY 2002. These resources are currently budgeted.

#### SCHEDULE:

The proposed schedule milestones for the rulemaking are as follows:

Publish proposed rule: Date of Commission's SRM for proposed rule plus 4 weeks.

Final rule to Commission: Date of Commission's SRM for proposed rule plus 9 months.

#### **COORDINATION:**

The Office of the General Counsel has no legal objection to the proposed rulemaking. The Office of the Chief Financial Officer has reviewed this Commission paper for resource implications and has no objections.

#### **RECOMMENDATION:**

#### That the Commission:

- 1. Approve publication in the *Federal Register* of the attached notice of proposed rulemaking (Attachment 1).
- Certify that this rule, if adopted, will not have a significant impact on a substantial number of small entities and satisfies the requirements of the Regulatory Flexibility Act, 5 U.S.C. 605(b).

#### Note:

- a. The notice of proposed rulemaking (Attachment 1) will be published in the *Federal Register* for a 75-day public comment period.
- b. The Regulatory Analysis (Attachment 2) and the Environmental Assessment (Attachment 3) will be available in the Public Document Room.
- c. The Chief Counsel for Advocacy, Small Business Administration, will be informed of the certification regarding economic impact on small entities and the reasons for it, as required by the Regulatory Flexibility Act.
- d. The appropriate congressional committees will be informed.
- e. An OMB clearance package is not required because the burden reduction is insignificant.
- f. The staff will request comments on the proposed rulemaking package from State Liaison Officers.
- g. Copies of the *Federal Register* notice of proposed rulemaking will be distributed to all power reactor licensees. The notice will be sent to other interested members of the public upon request.

#### Commissioners

h. The staff will request comments on the proposed rulemaking package from State Liaison Officers.

/RA by Carl J. Paperiello Acting For/

William D. Travers Executive Director for Operations

#### Attachments:

- 1. Draft Federal Register Notice
- 2. Draft Regulatory Analysis
- 3. Environmental Assessment

# **ATTACHMENT 1**

FEDERAL REGISTER NOTICE

**NUCLEAR REGULATORY COMMISSION** 

10 CFR Part 50

RIN 3150-AG84

Financial Information Requirements for Applications to Renew or Extend

the Term of an Operating License for a Power Reactor

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Proposed rule.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) proposes to amend its regulations to

remove the requirement in 10 CFR 50.33(f) that non-electric-utility power reactor licensees submit

financial qualifications information in their license renewal applications, and to add a requirement

in a new 10 CFR 50.76 that licensees of nuclear power reactors who are electric utilities

reorganizing as non-electric-utility entities without a license transfer must notify the NRC and

submit information on their financial qualifications. The proposed rule would reduce unnecessary

regulatory burden for licensees seeking renewal of operating licenses, and ensure that licensees

reorganizing as non-electric-utility entities continue to be financially qualified to operate their

facilities and maintain the public health and safety.

**DATES:** The comment period expires on **(75 days after publication in the** *Federal Register***)**. Comments received after this date will be considered if it is practical to do so, but the Commission is only able to ensure consideration of comments received on or before this date.

**ADDRESSES:** Mail comments to Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff. Deliver comments to 11555 Rockville Pike, Rockville, Maryland, between 7:30 a.m. and 4:15 p.m. on Federal workdays.

You also may provide comments via the NRC's interactive rulemaking Website at (http://ruleforum.llnl.gov). This site provides the capability to upload comments as files (any format), if your Web browser supports that function. For information about the interactive rulemaking Website, contact Ms. Carol Gallagher at 301-415-5905 or e-mail cag@nrc.gov.

Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the Public Electronic Reading Room on the NRC Website at www.nrc.gov.

**FOR FURTHER INFORMATION CONTACT**: George J. Mencinsky, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-3093, e-mail *gjm@nrc.gov*.

#### SUPPLEMENTARY INFORMATION:

#### **Background**

Section 182.a. of the Atomic Energy Act of 1954, as amended (AEA), provides that "each application for a license. . .shall specifically state such information as the Commission, by rule or regulation, may determine to be necessary to decide such of the technical and financial qualifications of the applicant. . .as the Commission may deem appropriate for the license." The NRC's regulations governing financial qualifications reviews of applications for licenses to construct or operate nuclear power plants are provided in 10 CFR 50.33(f).

Section 50.33(f)(2) currently requires all applicants for initial operating licenses and renewal of operating licenses to submit financial qualifications information, except applicants for and holders of operating licenses for nuclear power reactors that are electric utilities. This provision, adopted on September 12, 1984 (49 FR 35747), was based on the premise that the ratemaking process ensures that an applicant that is an electric utility and a holder of an operating license will have funds to operate the plant safely. Because entities other than electric utilities did not have recourse to ratemaking, they were required to submit information on financial qualifications in accordance with § 50.33(f), and the NRC was required to make a finding of financial qualification for these nonutility entities under § 50.57(a)(4).

In issuing the License Renewal Rule, 10 CFR Part 54 (56 FR 64943;

December 13, 1991), the Commission reaffirmed that the basis of the 1984 rulemaking for eliminating financial qualifications review for electric utilities applies not only for the term of the original license, but also for the period of operation covered by a renewed license

(56 FR at 64968). However, the findings required to issue a renewed license based on the standards contained in 10 CFR 54.29 do not require a finding regarding financial qualifications for non-electric-utility entities seeking a renewal license. The 1991 rule left unchanged the requirement in § 50.33(f)(2) that license renewal applicants that are not electric utilities submit financial qualifications information in their renewal applications and extended the 1984 rule's finding to applicants for renewal of operating licenses. The revision to 10 CFR Part 54 published on May 8, 1995 (60 FR 22461), did not amend this requirement. Thus, while non-electric-utility entities are required to submit financial qualifications information, there is no requirement for a finding of financial qualifications for non-electric-utility entities, and no basis for the lack of such a finding requirement.

Since the 1995 rulemaking, the NRC has received numerous requests for license renewals and has granted eight renewed licenses for four plant sites to electric utilities. However, because of ongoing deregulation in the power market, new entities other than electric utilities may be created to become licensees of nuclear power plants. Some of these entities may decide to renew their licenses. Under the current rule they would be required to submit financial qualifications information under § 50.33(f)(2). Moreover, despite the language of § 54.29, the NRC must make a case-by-case finding of financial qualifications.

Such a case-by-case determination would be resource-intensive and may result in delays in approving renewal applications. The staff has reviewed the license transfer process to determine if there was a basis in the regulatory process that would obviate the need for such a finding at license renewal. The staff determined that, with one exception, the NRC does not need the financial qualifications information from license renewal applicants that are not electric utilities since the NRC can obtain and track financial qualifications information from the licensees through means other than the license renewal process. The exception is the potential gap in the financial

qualifications regulation for non-electric-utility entities when a licensee transitions from an electric utility to an entity other than an electric utility without transferring its license. Although almost all utilities transfer to non-utility status with a license transfer, this regulatory gap, if not closed, would prevent the NRC from making a generic determination that financial qualifications review is unnecessary at license renewal. Therefore, the staff proposes to adopt a provision to close the gap in this proposed rule.

# Regulatory Oversight of Licensees' Financial Qualifications and Discussion of Proposed Rule

With one exception, the NRC has provisions in its regulations to evaluate an nuclear reactor applicant's or licensee's financial qualifications at several points - at initial licensing, before license transfers, and when circumstances warrant an ad hoc request for additional financial information. In addition, the NRC staff informally monitors the financial trade press for information on its licensees' financial situations. The one exception relates to a situation when a licensee transitions from an electric utility to an entity other than an electric utility without transferring its license. This rule would rectify the regulatory gap by imposing a request for financial qualifications information from the licensee. With the addition of this provision, the Commission believes it has a basis for concluding that it is unnecessary to review financial qualifications information explicitly during the license renewal process for holders of operating licenses for nuclear power reactors. The NRC does not believe that the license renewal process, in and of itself, is sufficiently unique to warrant a concomitant financial review.

The staff relies on the requirement in 10 CFR 50.33(f)(2) to obtain financial qualifications information on applicants seeking renewal of nonpower reactor operating licenses. The license

renewal process for nonpower reactors, unlike the license renewal process for power reactors, includes a financial qualifications review. The staff does not propose to amend this requirement since the regulatory oversight of nonpower reactor licensees does not permit ongoing oversight, thus necessitating a review of financial qualifications for nonpower reactor licensees at renewal.

#### **Initial Licensing Reviews**

The NRC performs financial qualifications reviews during initial licensing. These reviews form part of the licensing basis that the licensee must maintain for the 40-year term of the initial license and for any license renewal period. Financial qualifications reviews at the operating license stage distinguish between license applicants that are electric utilities as defined in 10 CFR 50.2 and those that are not. Applicants other than electric utilities are required to submit estimates for total annual operating costs for each of the first five years of operation of the facility, and indicate the sources of funds to cover these costs. The NRC evaluation of the financial qualifications of an entity other than an electric utility applicant is based on the submitted 5-year projections of income and expenses and on current information from a number of major financial rating service publications. The NRC publishes the results of its evaluation in a safety evaluation report. The NRC's regulations do not require additional formal financial qualifications reviews at scheduled intervals.

#### License Transfer Reviews

A license transfer under 10 CFR 50.80 may occur at any time during the period of the license. The NRC also reviews the financial qualifications of non-electric-utility applicants seeking

to become licensees through direct license transfers (plant sales), and considers changes in the financial qualifications of an existing licensee, whether or not it is an electric utility, that might occur in connection with an indirect license transfer by a merger, acquisition, or restructuring action. For a direct license transfer, a non-electric-utility applicant must submit all the information required under § 50.33(f).

Informal Screening of Financial and Nuclear Industry Trade Press and Other Information Sources

To keep abreast of deregulation and other developments potentially affecting its power reactor licensees, the NRC staff screens the financial and trade press and other information sources (e.g., State legislative reports) to determine whether a licensee or license applicant remains an electric utility or otherwise requires additional review of its financial qualifications. To date, all utility-to-nonutility transitions by NRC power reactor licensees have been accomplished through restructurings that involved license transfers. The NRC examines license transfers to determine whether a proposed transferee is, among other requirements, financially qualified to conduct the activities authorized by a license. If the licensee becomes an entity other than an electric utility without going through a license transfer, the NRC believes that it will become aware of the change through its informal screening process. The NRC can then request additional information under § 50.33(f)(4), as described in the next section.

Ad Hoc Reviews Under 10 CFR 50.33(f)(4)

Section 50.33(f)(4) states: "The Commission may request an established entity or newly formed entity to submit additional or more detailed information respecting its financial

arrangements and status of funds if the Commission considers this information to be appropriate.

This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility." This section permits the NRC to require license applicants or licensees to submit relevant financial information on the qualifications of the licensee to manage licensed activities at any time.

Proposed Requirement for Additional Information That May Not Be Otherwise Obtained Under the NRC's Financial Qualifications Review Framework

In some situations a licensee may transition from an "electric utility," as defined in CFR 50.2, to a company whose rates are not regulated by a public utility commission or the Federal Energy Regulatory Commission on a cost of service basis. If such a transition were to occur in the absence of a license transfer, the NRC would then have no formal process to evaluate the licensee's financial qualifications (although, as discussed previously, the NRC's informal monitoring process would identify such transitions and could trigger, if warranted, a request for additional information pursuant to § 50.33(f)(4)). Therefore, the NRC proposes to create 10 CFR 50.76, a requirement segregated from § 50.33(f)(2), which would require licensees that are transitioning from an electric utility to a non-electric-utility, without going through license transfers, to submit financial information sufficient to allow the NRC to determine whether the licensee remains financially qualified to conduct the activities authorized by the license. Although the NRC expects that this type of transition will occur rarely, if at all, this requirement would ensure a financial qualifications review resulting from all relevant triggering events and, thereby, enhance public confidence while maintaining regulatory efficiency and effectiveness.

Section 50.76 was created to provide a separation from § 50.33, since the latter section focuses on applicants rather than licensees.

Retention of Nonpower Reactor Financial Reviews at License Renewal

The NRC will retain the financial qualifications requirements in § 50.33(f)(2) for nonpower reactor (NPR) applicants that wish to renew or extend their licenses. Nonpower reactor licenses are generally renewed for 20 years. The NRC does not normally perform follow-up financial reviews after the initial 20-year license is issued. The NRC staff does not normally follow changes in NPR licensee financial qualifications because NPR owners are primarily financially stable nonprofit educational or research institutions, either privately, State, or Federally owned, and do not report financial information to sources readily available to the NRC. Additionally, license transfers for NPRs and the associated financial reviews are rare. A small number of NPRs are owned and operated by private companies. Therefore, financial qualification problems are not likely to become obvious, at least in part because of the unavailability of accessible information, as cited above. In some cases, the NRC has found financial weaknesses or ambiguities during NPR license renewals that it would not have discovered otherwise. As a result of the review, the NRC was able to require the licensee to take corrective action. Therefore, the NRC considers it appropriate to review NPR licensees' financial qualifications when they apply to renew their licenses. The burden on NPR licensees to demonstrate their financial qualifications every 20 years is offset by the assurance that licensee management is committed to continued operation.

Conclusions on Eliminating Financial Qualifications Reviews for Power Reactor Licensees at License Renewal

Section 50.33(f) requires all applicants for initial and renewed operating licenses to submit financial qualifications information, except applicants for and holders of operating licenses for nuclear power reactors that are electric utilities. Section 50.33(f)(2) requires an entity other than an electric utility that seeks to renew its operating license for a nuclear power plant submit the same financial information in its application that is required for an application for an initial license.

The NRC does not believe that the license renewal process, in and of itself, is sufficiently unique to warrant a separate financial review. First, the NRC's regulatory processes for financial qualifications reviews adequately ensure that the NRC can take appropriate regulatory action when warranted by changes in a licensee's financial qualifications. Second, the submission of financial qualifications information and a finding of financial qualifications for a nuclear power plant licensee at the license renewal stage, by itself, is not likely to have any impact on a licensee's financial qualifications, and therefore should not be a factor in the renewal decision. In contrast, there are valid regulatory reasons for conducting specified financial qualifications reviews at other stages -- i.e., at initial licensing, when an applicant's financial qualifications need to be determined in accordance with the AEA's requirements; at the time of a license transfer, when deregulation initiatives are likely to affect an applicant's or licensee's financial qualifications through restructuring, plant sales, or other events; or at times of special circumstances, when ad hoc reviews under § 50.33(f)(4) may be warranted.

For these reasons, the NRC proposes to change the requirement in the last sentence of § 50.33(f)(2) with respect to entities other than electric utilities seeking renewal of operating licenses for nuclear power reactors. The proposed rule would (1) eliminate the need for such entities to provide financial qualifications information as part of the license renewal process, (2) retain the existing requirement in § 50.33(f) for nonpower reactors to provide financial qualifications information, and (3) add a new § 50.76, "Licensee's change of status; financial

qualifications." Section 50.76 would require that any electric utility power reactor licensee that becomes an entity other than an electric utility without transferring the license must provide the same financial information that is required for obtaining an initial operating license. The proposed rule would not affect the submission of financial qualifications information and the need for a finding of financial qualifications with respect to direct transfers of nuclear power plant operating licenses, nor would the rule affect the review of whether an indirect transfer would change the respective licensee's financial qualifications.

The NRC believes this proposed rule would be consistent with the NRC's Strategic Goals of making NRC activities and decisions more effective and efficient and reducing unnecessary regulatory burden. The proposed rule would help advance these goals by eliminating the need for "entities other than electric utilities" to submit information on financial qualifications, as is the case now for electric utilities, in connection with license renewal, and would make the financial qualifications review requirements consistent with the bases of the License Renewal rule in 10 CFR Part 54, which does not require a finding of financial qualifications for those power reactor licensees applying for a renewed nuclear power plant operating license. The proposed rule would not have an adverse impact on maintaining safety; the provisions in § 50.33(f)(4) already ensure that financial information can be obtained from a licensee whenever the NRC considers this information appropriate.

#### **Section-by-Section Analysis**

10 CFR 50.33, Contents of applications; general information.

Section 50.33(f)(2) would be amended to replace a requirement that now states license renewal applicants must provide financial qualifications information with a requirement that states power reactor applicants for license renewal no longer need to provide financial qualifications information. Nonpower reactor applicants, on the other hand, would continue to submit financial qualifications information in the applications as is currently required. A new sentence would be added to § 50.33(f)(2) to specify that nonpower reactor license renewal applicants must continue to submit financial qualifications information in their applications.

10 CFR 50.76, Licensee's change of status; financial qualifications.

Section 50.76, a new requirement segregated from § 50.33(f)(2), would be adopted to cover situations in which a licensee changes from an electric utility to a non-electric-utility, i.e., a company that cannot obtain revenue from the cost of service ratemaking process, in a manner other than a license transfer under 10 CFR 50.80. The NRC proposes to require licensees that are transitioning from an electric utility to a non-electric-utility entity without transferring their licenses to submit financial information pursuant to the requirements of this new section. If a licensee will cease to be an electric utility, the NRC proposes that the licensee shall notify the NRC 75 days before the transition and provide the financial information at that time.

#### **Issues for Public Comment**

The NRC encourages comments on the content, level of detail, and the implementation of the proposed amendments. Suggestions or alternatives other than those described in this document and estimates of the cost of implementation are encouraged.

The NRC is particularly interested in receiving comments on the following issues related to this proposed rule:

- 1. Are there rulemaking alternatives to this proposed rule that were not considered in the regulatory analysis for this proposed rule?
- 2. Should the requirement that nonpower reactor licensees provide financial qualifications information when they apply for license renewal be eliminated? On what basis?
- 3. Are the regulations dealing with financial qualifications oversight sufficiently flexible not to require this information from non-electric-utility applicants seeking license renewals for power reactors?

#### **Availability of Documents**

This Federal Register document, the regulatory analysis, and the environmental assessment are available at the NRC Public Document Room at 11555 Rockville Pike, Rockville, Maryland; through the NRC's interactive rulemaking Website at <a href="http://ruleforum.llnl.gov">http://ruleforum.llnl.gov</a>; and through the NRC's Public Electronic Reading room at <a href="http://www.nrc.gov/reading-rm.html">http://www.nrc.gov/reading-rm.html</a>.

The ADAMS accession number of the notice is ML020700359. The regulatory analysis number is ML020700372. The environmental assessment number is ML020700379.

Single copies of the *Federal Register* notice, regulatory analysis, and environmental assessment may be obtained from George J. Mencinsky, Division of Regulatory Improvement Programs, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001 (301-415-3093), or *gjm@nrc.gov*.

#### **Plain Language**

The Presidential memorandum dated June 1, 1998, entitled "Plain Language in Government Writing," directed that the Government write in plain language. This memorandum was published on June 10, 1998 (63 FR 31883). In complying with this directive, editorial changes have been made in this proposed rule to improve readability of the existing language of those provisions being revised. These types of changes are not discussed further in this document. The NRC requests comment on the proposed rule specifically with respect to the clarity and effectiveness of the language used. Comments should be sent to the address given in the ADDRESSES section.

#### **Voluntary Consensus Standards**

The National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113, requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standard bodies unless the use of such a standard is inconsistent with applicable law or is otherwise impractical. In this proposed rule, the NRC would eliminate the requirement that applicants for power reactor license renewal provide financial qualifications information, and add a new requirement for submission of financial information on electric utilities holding operating licenses for nuclear power reactors, who cease to be electric utilities in a manner other than a license transfer under 10 CFR 50.80. This proposed rule would not

constitute a standard that establishes generally applicable requirements, and the requirement to use a voluntary consensus standard is not applicable.

#### Finding of No Significant Environmental Impact: Availability

The Commission has determined that under the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR Part 51 that this proposed rule, if adopted, would not be a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required.

There are no significant radiological environmental impacts associated with the proposed action, since the proposed action only addresses the submission of financial information to the NRC. The proposed action does not involve nonradiological plant effluents and has no other environmental impact. Therefore, NRC expects that no significant environmental impact would result from the proposed rule.

The determination of this environmental assessment is that there will be no significant offsite impact to the public from this action. However, the general public should note that the NRC is seeking public participation. The NRC has also committed to complying with Executive Order (E.O.) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," dated February 11, 1994. The NRC evaluated environmental justice for this environmental assessment and has determined that there are no disproportionate high and adverse impacts on minority and low-income populations. In the letter and spirit of E.O. 12898, the NRC is requesting public comment on any environmental justice considerations or questions that the public thinks may be related to this proposed rule but somehow was not addressed. E.O. 12898 describes environmental justice as "identifying and addressing, as appropriate,

disproportionately high or adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Comments on any aspect of the environmental assessment, including environmental justice, may be submitted to the NRC as indicated under the ADDRESSES heading.

The NRC has sent a copy of the environmental assessment and this proposed rule to all State Liaison Officers and requested their comments.

#### **Paperwork Reduction Act Statement**

This proposed rule eliminates the burden on non-electric-utility power reactor licensees to submit financial qualifications information upon license renewal as required by the current § 50.33(f)(2). However, power reactor licensees that become non-electric-utility power reactor entities without transferring the license would still be required to provide this information under new Section 50.76. The public burden reduction for this information collection is estimated to average 100 hours per request. Because the burden reduction for this information collection is insignificant, Office of Management and Budget (OMB) clearance is not required. Existing requirements were approved by the Office of Management and Budget, approval number 3150-0011.

#### **Public Protection Notification**

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

#### **Regulatory Analysis**

The Commission has prepared a regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The regulatory analysis may be examined, and/or copied for a fee, at the NRC's Public Document Room at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. The Commission requests public comment on the regulatory analysis. Comments should be submitted to the NRC in accordance with the instructions in the ADDRESSES section of this notice.

#### **Regulatory Flexibility Certification**

In accordance with the Regulatory Flexibility Act, as amended, 5 U.S.C. 605(b), the Commission certifies that this proposed rule would not, if adopted, have a significant economic impact on a substantial number of small entities. This proposed rule would affect only the renewal of nuclear power reactor licenses. The companies that own these reactors are not "small entities" as defined in the Regulatory Flexibility Act or the Size Standards established by the NRC (10 CFR 2.810).

#### **Backfit Analysis**

The NRC has determined that the backfit rule does not apply to this proposed rule. The proposed rule would (1) permissively relax the current requirement in § 50.33(f) for submission of

financial qualifications information by entities other than electric utilities seeking renewal of their nuclear power plant operating licenses, and (2) impose a new requirement for submission of financial information on electric utilities who hold operating licenses for nuclear power reactors, who cease to be electric utilities in a manner other than a license transfer under 10 CFR 50.80. Such information collection and reporting requirements do not constitute regulatory actions to which the backfit rule applies. In addition, with respect to the permissive relaxation in § 50.33(f), such relaxations do not "impose" a requirement, which is an essential element of "backfitting" as defined in Section 50.109(a)(1).

Accordingly, the proposed rule's provisions do not constitute a backfit and a backfit analysis need not be performed. However, the staff has prepared a regulatory analysis that identifies the benefits and costs of the proposed rule and evaluates other options for addressing the identified issues. As such, the regulatory analysis constitutes a "disciplined approach" for evaluating the merits of the proposed rule and is consistent with the intent of the backfit rule.

#### List of Subjects in 10 CFR Part 50

Antitrust, Classified information, Criminal penalties, Fire protection, Intergovernmental relations, Nuclear power plants and reactors, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 553, the NRC is proposing to adopt the following amendments to 10 CFR Part 50.

#### PART 50--DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

1. The authority citation for Part 50 continues to read as follows:

AUTHORITY: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 938, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2239, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951, as amended by Pub. L. 102-486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 936, 955, as amended (42 U.S.C. 2131, 2235); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd), and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a, and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80 and 50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

2. In §50.33, paragraph (f)(2) is revised to read as follows:

§ 50.33 Contents of applications; general information.

\* \* \* \* \*

(f) \* \* \*

(2) If the application is for an operating license, the applicant shall submit information that demonstrates the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license. The applicant shall submit estimates for total annual operating costs for each of the first five years of operation of the facility. The applicant shall also indicate the source(s) of funds to cover these costs. An applicant seeking to renew or extend the term of an operating license for a power reactor need not submit financial information as is required in an application for an initial license. Applicants to renew or extend the term of an operating license for a nonpower reactor shall include the financial information that is required in an application for an initial license.

\* \* \* \* \* \*

#### 3. Section 50.76 is added to read as follows:

§ 50.76 Licensee's change of status; financial qualifications.

An electric utility licensee holding an operating license (including a renewed license) for a nuclear power reactor, no later than 75 days prior to ceasing to be an electric utility in any manner not involving a license transfer under § 50.80 of this part, shall provide the NRC with the financial qualifications information that would be required for obtaining an initial operating license as specified in § 50.33(f)(2). The financial qualifications information must address the first full five years of operation after the date the licensee ceases to be an electric utility.

Dated at Rockville, Maryland, this \_\_\_\_ day of \_\_\_\_\_\_ 2002.

For the Nuclear Regulatory Commission.
Annette L. Vietti-Cook,

# ATTACHMENT 2 REGULATORY ANALYSIS

### **REGULATORY ANALYSIS**

## Proposed Rule - 10 CFR Part 50

Financial Information
For Applications To Renew Or Extend The Term
Of An Operating License For A Power Reactor

## Table of Contents

1.	Introd	Introduction					
	1.1	Statement of the Problem and Objective of the Rulemaking	1				
	1.2	1.2 Current Regulations Governing Submission of Financial Qualifications Inforfor Power Reactor Licensees					
2.	Ident	Identification and Preliminary Analysis of Alternative Approaches					
	2.1	Option 1 - No Action	3				
		2.1.1 Amendment to 10 CFR 50.33(f)	3				
		2.1.2 Section 10 CFR 50.76	4				
	2.2	Option 2 - Proposed Action					
		2.2.1 Amendment to 10 CFR 50.33(f)	4				
		2.2.2 Section 10 CFR 50.76	4				
3.	Estim	Estimation and Evaluation of Values and Impacts					
	3.1	Identification of Affected Attributes	4				
	3.2	Analytical Methodology	6				
		3.2.1 Model Design	6				
		3.2.2 Data and Assumptions	8				
	3.3	Analysis					
		3.3.1 Option 1 - No action	14				
		3.3.2 Option 2 - Proposed Action	14				
4.	Resu	ults	19				
5.	Back	Backfit Analysis					
6.	Decis	Decision Rationale					
7	Imple	Implementation 23					

#### 1. Introduction

The U.S. Nuclear Regulatory Commission (NRC) has initiated a rulemaking to amend 10 CFR Part 50 regulations pertaining to financial qualifications reviews for nuclear power plants. NRC is proposing two amendments in this rulemaking that address financial qualifications reviews for non-electric utility power reactor licensees. The first amendment reduces the regulatory burden on non-electric utility power reactor licensees by eliminating the requirement that these entities submit financial qualifications information when applying for a license renewal. The second amendment creates a section to 10 CFR Part 50, a requirement segregated from 10 CFR 50.33(f)(2), that provides a formal mechanism requiring the submission of financial qualifications information in situations where electric utilities transition to non-electric utility status without a license transfer.

The remainder of this introduction is divided into two sections. Section 1.1 describes the problems addressed by the proposed rule and the objectives of the rulemaking. Section 1.2 provides background information on the current regulations for financial qualifications information submissions for nuclear power reactor licensees.

#### 1.1 Statement of the Problem and Objective of the Rulemaking

NRC has determined that the existing regulations in 10 CFR Part 50 should be modified to reduce regulatory burden by eliminating unnecessary submissions of financial qualifications information and to provide regulatory clarity by establishing a formal process to review financial qualifications information in certain circumstances in which the rule currently is unclear. Specifically, amendments to Section 50.33(f) would reduce the regulatory burden and a new 10 CFR 50.76 would establish a formal process to review financial qualifications information for electric utility licensees that transition to non-electric utility status without a license transfer.

Section 50.33(f)(2) requires non-electric utility power reactor applicants for license renewals to submit financial qualifications information with their applications. NRC has concluded that the financial review of non-electric utility power reactor applicants for license renewal is unnecessary for the following reasons. NRC's current regulations provide for a review of financial qualifications at several stages during a license, such as at initial license application, license transfer, and at any time NRC determines that the licensee's financial health requires a review. Thus the current regulations allow NRC to monitor and evaluate changes in licensees' financial status. In addition, because license renewal is not accompanied by a change in a licensee's financial condition, it does not warrant a financial review. By amending

Section 50.33(f)(2) to eliminate the requirement for submission of financial qualifications information from non-electric utility power reactors renewing an operating license, NRC would remove unnecessary burden and treat all power reactor licensees consistently.

Section 50.76 would establish a formal process to review the financial qualifications of electric utilities making a transition to non-electric utility status without a license transfer. NRC's current regulations do not provide for a formal process to review financial qualifications of electric utility power reactor licensees that transition to non-electric utility status. The establishment of a formal review process is important because when an electric utility licensee transitions to non-electric utility status, the licensee would no longer be regulated on a cost of service basis by a state public utility commission (PUC) or the Federal Energy Regulatory Commission (FERC), both of which establish rates that ensure sufficient funds for safe operations. Non-electric utility power reactor

licensees are subject to rates set by the open market. Although NRC is concerned about the impacts of deregulation on its power reactor licensees' financial condition, it has not found a consistent relationship between a licensee's financial health and general indicators of safety. NRC believes that establishing a formal review requirement would enhance public confidence while maintaining regulatory efficiency and effectiveness. NRC already has an informal monitoring process that involves NRC staff monitoring the financial trade press for potentially relevant information on changes in reactor licensee financial strength. The proposed action would complete a set of requirements for NRC's review of financial qualifications that would allow total coverage of all relevant triggering events for power reactor licensees, including initial operating license application, transfer of the license to another entity, transition from electric utility to non-electric utility status without a license transfer, and evidence of a decline in the financial status of a licensee. Exhibit 1-1 shows the financial qualifications submission requirements for these four triggering events. Providing this coverage of all relevant triggering events is expected to enhance public confidence.

Exhibit 1-1: Power Reactor Financial Qualification Submission Requirements

Event	Requirements for Electric Utilities	Requirements for Non-Electric Utility Entities
Initial License to Operate	Rate making process governed by state PUCs and/or FERC ensures sufficient funds are available for operation and thus financial qualifications are not required to be submitted.	Financial qualifications are submitted with the initial licensing application for NRC's review.
License Transfer	A license transfer to another electric utility does not require submission of financial qualifications for the reasons stated under Initial Licensing.	Financial qualifications are submitted for review as part of the license transfer process.
Transition from an Electric Utility to a Non-Electric Utility	Not applicable	Section 50.76 would establish a formal process for NRC to review the financial qualifications of the new non-electric utility entity during the transition process.
Evidence of a Decline in Licensee Financial Status	Financial qualifications information is submitted upon request of NRC.	Financial qualifications information is submitted upon request of NRC.

2

<sup>&</sup>lt;sup>1</sup> NRC's *Final Policy Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry* discusses its concerns regarding deregulation of power reactor licensees. The policy statement was published in the Federal Register, Vol. 62, No.160, August 19, 1997, page 44071.

# 1.2 Current Regulations Governing Submission of Financial Qualifications Information for Power Reactor Licensees

NRC has regulations in place to evaluate a power reactor applicant's or licensee's financial qualifications at several points in the lifetime of the license. The regulations include the review of financial qualifications information at initial operating licensing (Section 50.33(f)(2)), before license transfer (Section 50.80), and where circumstances warrant an ad hoc request for additional financial information (Section 50.33(f)(4)). The following paragraphs discuss the financial qualifications information submission requirements of these three sections of 10 CFR.

Section 50.33(f)(2) - Initial Operating License Applications. Section 50.33(f)(2) requires nonelectric utility applicants for initial operating licenses for nuclear power plants to submit financial qualifications information (i.e., projections of revenues and expenses for the first 5 years of operations) with their applications. Applicants that are electric utilities are exempt from these requirements because the ratemaking process assures that funds needed for safe operation would be made available to regulated electric utilities.

Section 50.80 - License Transfers. Section 50.80 requires applicants seeking to transfer a power reactor operating license from an electric utility to a non-electric utility to submit financial qualifications information. License transfers from one electric utility to another electric utility are exempt from submitting financial qualifications information because the ratemaking process assures that funds needed for safe operation would be made available to regulated electric utilities.

Section 50.33(f)(4) - Ad Hoc Reviews. Section 50.33(f)(4) allows NRC to request from licensees financial qualifications information that would allow NRC to assess the ability of the licensee to manage licensed activities in a manner that does not compromise the health and safety of the public. These requests are made independently of initial licensing or the renewal process and afford NRC the ability to review the financial qualifications information of a licensee at any time, particularly if a licensee's financial status declines.

#### 2. Identification and Preliminary Analysis of Alternative Approaches

The following discussion describes the regulatory options being considered in this proposed rulemaking for each of the two amendments, with analysis presented in Section 3.

#### 2.1 Option 1 - No Action

#### 2.1.1 Amendment to 10 CFR 50.33(f)

Under Option 1, the no-action alternative, NRC would not amend the current regulations on financial qualifications reviews of non-electric utility applications for renewal of operating licenses for nuclear power plants. Non-electric utility power reactors applying for license renewals would continue to be required to submit financial qualifications information and NRC would continue to review this information. Option 1 is rejected because it continues to require the submission of financial qualifications information and thus maintains an unnecessary burden on non-electric utility power reactor licensees and NRC. Thus Option 1 results in higher costs to both non-electric utility licensees and the NRC.

#### 2.1.2 Section 10 CFR 50.76

Under Option 1, the no-action alternative, NRC would not create a section, requiring electric utility licensees that transition to non-electric utility status without a license transfer to submit financial qualifications information. Electric utility power reactors that transition to non-electric utility status would continue to make this transition without submitting financial qualifications information. Option 1 is rejected because it does not meet NRC's program goal of regulatory efficiency and effectiveness since NRC would not have a formal system in place to determine whether electric utility power reactor licensees, who transition to non-electric utility status without a license transfer, remain financially qualified to conduct the activities under the license.

#### 2.2 Option 2 - Proposed Action

#### 2.2.1 Amendment to 10 CFR 50.33(f)

Under Option 2, NRC would provide relief through rulemaking from the current financial qualifications information submission requirements for non-electric utility applicants for license renewal, based on NRC's ability to obtain financial qualifications information through other means as necessary. Specifically, NRC would eliminate the requirement that non-electric utility power reactor applicants submit financial qualifications information in license renewal applications. Option 2 is preferred over Option 1 because it would provide regulatory relief for non-electric utility power reactor licensees and reduce NRC's costs.

#### 2.2.2 Section 10 CFR 50.76

Under Option 2, NRC would add a new requirement, segregated from Section 50.33(f)(2), for electric utility licensees that transition to non-electric utility status without a license transfer to submit financial qualifications information at the time of transition. Option 2 is preferred over Option 1 because it meets NRC's program goal of regulatory efficiency and effectiveness since NRC would have a formal system in place to determine whether electric utility power reactor licensees, who transition to non-electric utility status without a license transfer, remain financially qualified to conduct the activities under the license.

#### 3. Estimation and Evaluation of Values and Impacts

This section describes the analysis conducted to identify and evaluate the values (benefits) and impacts (costs) of the two regulatory options. Section 3.1 identifies the attributes expected to be affected by the proposed rulemaking. Section 3.2 describes how the analysis evaluates the values and impacts. Finally, Section 3.3. presents the details of the calculations used to generate the estimated values and impacts.

#### 3.1 Identification of Affected Attributes

This section identifies the factors within the public and private sectors that the regulatory alternatives (discussed in Section 2) are expected to affect. These factors are classified as "attributes" using the list of potential attributes provided by NRC in Chapter 5 of its *Regulatory* 

*Analysis Technical Evaluation Handbook.*<sup>2</sup> Each attribute listed in Chapter 5 of the handbook was evaluated. The regulatory action is expected to affect the following attributes:

- Industry Implementation -- If the proposed rule amendments are implemented, power reactor licensees would incur a cost to read and familiarize themselves with the regulations.
- Industry Operation -- The proposed action to amend Section 50.33(f)(2) would result in a savings to non-electric utility power reactor licensees who apply for power reactor license renewals. The proposed action to create a Section 50.76, would result in a new cost for electric utility to non-electric utility transitions not involving an operating license transfer. Under Section 50.76 licensees would be required to submit the financial qualifications information that is required in Section 50.33(f)(2).
- NRC Operation -- The proposed action to amend Section 50.33(f)(2) would result
  in a savings to NRC, since a review of financial qualifications information would no
  longer be required. NRC would incur costs associated Section 50.76, which
  requires the review of financial qualifications information and issuance of a finding
  of financial qualification for each electric utility power reactor licensee that
  transitions to non-electric utility status without a license transfer.
- Regulatory Efficiency -- The proposed amendment to Section 50.33(f)(2) would reduce unnecessary burden on regulated entities. The proposed amendment to Section 50.76 would provide for greater regulatory clarity. The benefits accruing to this attribute are evaluated qualitatively.

Attributes that are *not* expected to be affected by the rulemaking options include the following:

- Public Health (Routine);
- Public Health (Accident);
- Occupational Health (Routine);
- Occupational Health (Accident);
- Off-site Property;
- On-site Property;
- NRC Implementation;
- Other Government;
- General Public;
- Improvements in Knowledge;
- Antitrust Considerations;
- Safeguards and Security Considerations; and
- Environmental Considerations.

NRC believes that the proposed rule would not adversely affect safeguards against radiation exposure to humans and property (i.e., public health and safety) because licensees still would be

<sup>&</sup>lt;sup>2</sup> Regulatory Analysis Technical Evaluation Handbook, Final Report, NUREG/BR-0184, Office of Nuclear Regulatory Research, January 1997.

required to have the financial resources to operate their reactors safely. No changes in the types or quantities of effluents that may be released offsite would result from this rulemaking, nor would there be any anticipated increase in the allowable individual or cumulative occupational radiation exposure. The remaining attributes are not affected primarily because the proposed changes are administrative in nature.

#### 3.2 Analytical Methodology

This section describes the process used to evaluate values and impacts associated with the proposed rule. The *values* (benefits) of the rule include any desirable changes in affected attributes (e.g., reduction of regulatory burden) while the *impacts* (costs) include any undesirable changes in affected attributes (e.g., monetary costs). As described in Section 3.1, the attributes expected to be affected include the following:

- Industry Implementation;
- Industry Operation;
- NRC Operation; and
- Regulatory Efficiency.

This analysis relies on a qualitative evaluation for the affected attribute Regulatory Efficiency.<sup>3</sup>

The remaining three attributes (industry implementation, industry operation, and NRC operation) are evaluated quantitatively. Quantitative analysis requires a baseline characterization, including factors such as the anticipated number of non-electric utility power reactor license renewal applications and the number of electric utility to non-electric utility transitions without a license transfer. The analysis proceeds quantitatively for these attributes using the assumptions discussed in Section 3.2.2.

#### 3.2.1 Model Design

This section describes the cost model used to calculate the values and impacts for the affected attributes of the proposed rule. The *values* are considered to be savings related to (1) non-electric utility licensees applying for license renewal no longer having to prepare and submit financial qualifications information, and (2) NRC no longer having to review the financial qualifications information and issue a finding. These savings are due to the amendments to Section 50.33(f)(2). Although the proposed action would result in enhanced regulatory efficiency, these benefits were not quantified.

The *impacts* of the proposed action are considered to be costs related to (1) electric utility power reactor licensees that transition to non-electric utility status without a license transfer preparing and submitting financial qualifications information, and (2) NRC's review of the financial qualifications information and issuance of a financial qualifications finding. These impacts are due to the amendments to Section 50.76. The additional impact of reading the regulations is also included in the analysis.

<sup>&</sup>lt;sup>3</sup> The regulatory efficiency attribute is evaluated qualitatively by definition. See NRC's *Regulatory Analysis Technical Evaluation Handbook*, Section 5.5.14.

The analytical results are primarily driven by the number of non-electric utilities applying for license renewal and to a somewhat lesser extent the following four parameters, which are listed in descending order based on their effect on the results:

- 1. NRC's burden for reviewing financial qualifications information; and
- 2. The year when the license renewal application is submitted in relation to initial license expiration;
- 3. The licensee's burden for preparing and submitting financial qualifications information:
- 4. The number of licensees that transition from electric utility to non-electric utility status without license transfers.

There is a great deal of uncertainty associated with how many non-electric utility applications for license renewal will be submitted, since this is a business decision made by individual licensees. To account for this uncertainty, and the uncertainty in the four other parameters listed above, the analysis estimates reasonable lower and upper bounds for these parameters. The results also are presented with reasonable lower and upper bound values and impacts as well as best estimate values and impacts.

The values and impacts to licensees and NRC from the proposed action were assessed as follows:

Estimate the costs to all power reactor licensees due to reading the regulations.

For power reactor licensees, costs are calculated by multiplying the time required to review the new regulations by the hourly wage rate for licensee staff and by the total number of power reactor licensees.

• Estimate the savings to non-electric utility power reactor licensees and NRC from no longer having to prepare and review financial qualifications information.

For non-electric utility power reactor licensees, savings are calculated by multiplying the time required to prepare and submit the financial qualifications information by the hourly wage rate for licensee staff and by the number of non-electric utility power reactor license renewal applications.

For NRC, savings are calculated by multiplying the time required to review the financial qualifications information and issue a finding, by the hourly wage rate for NRC staff and by the number of non-electric utility power reactor license renewal applications.

Estimate the costs to NRC and electric utilities that transition to non-electric utility status without a license transfer.

For electric utility power reactor licensees, costs are calculated by multiplying the time required to prepare and submit the financial qualifications information by the

hourly wage rate for licensee staff and by the number of electric utility power reactors that transition to non-electric utility status without a license transfer.

For NRC, costs are calculated by multiplying the time required to review the financial qualifications information by the hourly wage rate for NRC staff and by the number of electric utility power reactors that transition to non-electric utility status without a license transfer. Pre-decisional costs of analyzing and developing the revised requirements are not included in this analysis.<sup>4</sup>

# 3.2.2 Data and Assumptions

The following sections present the data and assumptions used in the analysis described in Section 3.2.1.

# Power Reactor Licensees

- Power reactors are located at 65 sites containing 103 operating commercial power reactors.<sup>5</sup>
- Each site containing power reactors is assumed to apply for license renewal independent of other power reactors that may be owned by the same licensee.
- Eleven power reactor operating licensees, who own 26 power reactors at 15 sites, have already applied for or have announced they will apply for renewal before January 2003, which is the projected effective date of the final rule. These reactors are not included in the analysis. Eight power reactors at four sites have already received a renewed operating license: Arkansas Nuclear One 1, Calvert Cliffs 1 and 2, Edwin I. Hatch 1 and 2, and Oconee 1, 2, and 3. NRC is currently reviewing the renewal applications for 15 reactors at eight sites: Catawba 1 and 2, Fort Calhoun, McGuire 1 and 2, North Anna 1 and 2, Peach Bottom 2 and 3, St. Lucie 1 and 2, Surry 1 and 2, and Turkey Point 3 and 4. Three operating licensees have announced their intention to file for license renewal prior to 2003. These operating licensees own three reactors: Ginna, H.B. Robinson 2, and Summer 1.
- Unless available information indicates otherwise, each licensee is assumed to renew the operating licenses for all power reactors at a given location at the same time. For example, Baltimore Gas and Electric applied for reactor license renewals for both its Calvert Cliffs 1 and 2 reactors at the same time although the reactors have different initial license termination years, 2014 and 2016 respectively. However, Entergy Nuclear Generation Company filed for renewal of its Arkansas Nuclear One Unit 1 reactor but did not file for renewal of its Arkansas Nuclear One

<sup>&</sup>lt;sup>4</sup> Costs that are already incurred, such as all pre-decisional activities performed by NRC, are considered "sunk" costs and are not included in the analysis. See NRC's *Regulatory Analysis Technical Evaluation Handbook*, Section 5.5.9.

<sup>&</sup>lt;sup>5</sup> Information regarding the number of reactors and their license expiration dates was obtained from NUREG-1350, NRC Information Digest, 2000 Edition.

Unit 2 reactor at the same time. Based on the number of reactor sites (i.e., 65) and the fact that Entergy did not apply for license renewal for both Arkansas Nuclear One Units 1 and 2 at the same time, the analysis assumes there will be a maximum of 66 applications for license renewal. Because 15 sites have already applied for license renewal or plan to apply for license renewal prior to January 2003, the analysis includes only the 51 remaining potential license renewals during the time period of the analysis (i.e., 2003 through 2035, which is the latest initial license expiration date for an operating power reactor license).

- The licensees for all operating power reactors are assumed to renew the initial operating license of each reactor.<sup>6</sup>
- Only one license renewal/extension is sought for each reactor. Due to the uncertainties associated with the number of non-electric utility licensees that might seek a second license renewal and the timing of a second renewal application, the analysis only models one license renewal for each reactor. This assumption may result in the total net benefit of the proposed action being underestimated because the savings from the second license renewal applications from non-electric utility power reactor licensees are not included.
- Unless available information indicates otherwise, licensees file for operating license renewals 14 years before the initial licenses expire or in 2003, whichever is later. In the case of multiple reactors located at the same site, the applications are filed 14 years before the earliest license expiration date. The average and median number of years before initial license expiration that an application for renewal is submitted or is planned to be submitted is 14 years for the 54 reactors for which information is available. The lower and upper bounds for this parameter are assumed to be 10 years and 20 years, respectively. (see NUREG-1437, Volume 1, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants." Issued in May 1996, ". . . most utilities are expected to begin preparation for license renewal about 10 to 20 years before expiration of their original operating licenses.")
- The number of operating license renewal applications per year from non-electric utility applicants is assumed to be 20 percent of license renewal applicants that year. The actual number of renewal applications from non-electric utility applicants is expected to be correlated with the total number of renewal applications received from all power reactor licensees in any one year. The number of non-electric utility renewal applications is expected to be low because most renewals are expected to occur before electric utility power reactor licensees become non-electric utility licensees. Thus the analysis assumes a value of 20 percent of all renewal applications in each year. The lower and upper bounds for this parameter are assumed to be 10 percent and 30 percent, respectively. Due to the low number of

9

<sup>&</sup>lt;sup>6</sup> On June 8, 2000, Mr. William D. Magwood, IV, Director for the Department of Energy's Office of Nuclear Energy, Science, and Technology, in an address to the Subcommittee on Energy and Power, Committee on Commerce, U.S. House of Representatives, stated that the "overwhelming majority of the Nation's 103 operating plants can be expected to apply for and receive license renewals...".

licensees applying for license renewal in any one year, the calculation for the number of non-electric utility applicants is rounded to the nearest whole number. Thus the number of non-electric utility renewal applications will not necessarily equal 20 percent of the total number of all potential renewal applications, which is estimated to be 51.

- Power reactor licensees require 100 hours to prepare the financial qualifications information.<sup>7</sup> The lower and upper bounds for this parameter are assumed to be 50 hours and 200 hours, respectively.
- The average labor rate for licensee staff is \$80.00 per hour.<sup>8</sup>
- The number of electric utility power reactor licensees that transition to non-electric utilities without a license transfer is one every ten years, or five transitions, for the 50 year period 2003 to 2052. Information on the potential number of transitions to non-electric utility status is unavailable because such a transition is a business decision that is unlikely to be made public prior to the actual transition. To date there have been no such transitions that have not been accompanied by an application for license transfer. The lower and upper bounds for this parameter are one transition every 20 years, or three transitions, and one transition every five years, or 10 transitions, respectively. The first transition is assumed to occur in 2003 for the lower bound, best estimate, and upper bound calculations.
- Power reactor licensees require four hours each to review and familiarize themselves with the amended regulations.
- Exhibit 3-1 shows the actual or modeled license renewal application submission dates for each reactor. Information on actual or planned renewal application dates were obtained from the Nuclear Energy Institute (NEI) and NRC Nuclear Reactor Regulation staff for 54 power reactors. These 54 power reactors are identified with their license renewal dates in bold. The 34 modeled renewal dates are the anticipated dates for renewal. The actual date of renewal for each of these 34 sites may be different by five or more years.

Exhibit 3-1: Regulatory Analysis License Renewal Application Dates by Licensee

Expiration Date   Application Filing Date	Licensee	Reactor name	Initial License	Actual or Modeled
			<b>Expiration Date</b>	Application Filing Date <sup>a</sup>

<sup>&</sup>lt;sup>7</sup> The hours estimate is based on information obtained from the Nuclear Energy Institute (NEI), which indicated that assembling financial qualifications information required 40 hours for a research reactor at a university. This application was not submitted to NRC. Since NRC may request additional information or clarification of the financial information once submitted, the stated time to prepare the financial information may underestimate the actual time required. Therefore, given that a company's financials are typically more complex than a university's and that the benchmark research reactor application was not submitted, the analysis uses an estimate of 100 hours for preparing the financial qualifications information.

<sup>&</sup>lt;sup>8</sup> The labor rate is based on the Nuclear Reactor Regulation (NRR) NRC staff average hourly rate.

Americal	Collows: 4	0-140,0004	0-1-0040
AmerenUE	Callaway 1	Oct-18-2024	Oct-2010
	Clinton 1	Sep-29-2026	Sep-2012
AmerGen Energy Company	Oyster Creek	Dec-15-2009	Jan-2003
	Three Mile Island 1	Apr-19-2014	Jan-2003
	Palo Verde 1	Dec-31-2024	
Arizona Nuclear Power Project	Palo Verde 2	Dec-09-2025	Dec-2010
	Palo Verde 3	Mar-25-2027	
	Brunswick 1	Sep-08-2016	Mar-2004
Carolina Power & Light Co.	Brunswick 2	Dec-27-2014	
Carolina i ower a Light Co.	H.B. Robinson 2	Jul-31-2010	Jun-2002
	Shearon Harris 1	Oct-24-2026	Oct-2012
	Calvert Cliffs 1	Jul-31-2014	Apr-1998
Constellation Nuclear	Calvert Cliffs 2	Aug-31-2016	Api-1990
Constellation Nuclear	Nine Mile Point 1	Aug-22-2009	Oct-2003
	Nine Mile Point 2	Oct-31-2026	OCI-2003
Detroit Edison Co.	Fermi 2	Mar-20-2025	Mar-2011
	Millstone 2	Jul-31-2015	In a 2000
	Millstone 3	Nov-25-2025	Jan-2003
	North Anna 1	Apr-01-2018	
Dominion Generation	North Anna 2	Aug-21-2020	May-2001
	Surry 1	May-25-2012	
	Surry 2	Jan-29-2013	May-2001
	Catawba 1	Dec-06-2024	
	Catawba 2	Feb-24-2026	Jun-2001
	McGuire 1	Jun-12-2021	
Duke Power Co.	McGuire 2	Mar-03-2023	Jun-2001
	Oconee 1	Feb-06-2013	
	Oconee 2	Oct-06-2013	Jul-1998
	Oconee 3	Jul-19-2014	
Energy Northwest	Washington Nuclear 2	Dec-20-2023	Dec-2007
-	Arkansas Nuclear 1	May-20-2014	Feb-2000
	Arkansas Nuclear 2	Jul-17-2018	Sep-2003
	Grand Gulf 1	Jun-16-2022	Jun-2008
Entergy Nuclear Generation Company	Indian Point 2	Sep-28-2013	
	Indian Point 3	Dec-15-2015	Jan-2003
	James A. FitzPatrick	Oct-17-2014	Jan-2003
	Pilgrim 1	Jun-08-2012	Dec-2004
	River Bend 1	Aug-29-2025	Aug-2011

	Braidwood 1	Oct-17-2026	Oct-2012
	Braidwood 2	Dec-18-2027	
	Byron 1	Oct-31-2024	Oct-2010
	Byron 2	Nov-06-2026	
	Dresden 2	Jan-10-2006	Mar-2003
	Dresden 3	Jan-12-2011	Wai - 2005
Exelon Energy Co.	LaSalle County 1	May-17-2022	May-2008
Excion Energy Co.	LaSalle County 2	Dec-16-2023	Way 2000
	Limerick 1	Oct-26-2024	Oct-2010
	Limerick 2	Jun-22-2029	OCI-2010
	Peach Bottom 2	Aug-08-2013	Jul-2001
	Peach Bottom 3	Jul-02-2014	Jui-200 i
	Quad Cities 1	Dec-14-2012	Mar. 2002
	Quad Cities 2	Dec-14-2012	Mar-2003
	Beaver Valley 1	Jan-29-2016	Com 0004
FirstEnergy Nuclear Operating Company	Beaver Valley 2	May-27-2027	Sep-2004
	Davis-Besse	Apr-22-2017	Dec-2004
	Perry 1	Mar-18-2026	Mar-2012
	St. Lucie 1	Mar-01-2016	N 0004
	St. Lucie 2	Apr-06-2023	Nov-2001
Florida Power & Light Co.	Turkey Point 3	Jul-19-2012	0 0000
	Turkey Point 4	Apr-10-2013	Sep-2000
Florida Power Corp.	Crystal River 3	Dec-03-2016	Jan-2003
	D.C. Cook 1	Oct-25-2014	N. 0000
Indiana/Michigan Power Co.	D.C. Cook 2	Dec-23-2017	Nov-2003
Nebraska Public Power District	Cooper 1	Jan-18-2014	Apr-2005
North Atlantic Energy Service Corp.	Seabrook 1	Oct-17-2026	Oct-2012
	Duane Arnold	Feb-21-2014	Jan-2003
	Kewaunee	Dec-21-2013	Jan-2003
	Monticello	Sep-08-2010	Jan-2003
N 1 M	Palisades	Mar-14-2007	Jan-2003
Nuclear Management Co.	Point Beach 1	Oct-05-2010	
	Point Beach 2	Mar-08-2013	Jan-2003
	Prairie Island 1	Aug-09-2013	
	Prairie Island 2	Oct-29-2014	Jan-2003
Omaha Public Power District	Fort Calhoun	Aug-09-2013	Jan-2002
		Sep-22-2021	
	Diablo Canyon I	00p ZZ Z0Z 1	
Pacific Gas & Electric Co.	Diablo Canyon 1 Diablo Canyon 2	<u> </u>	Sep-2007
Pacific Gas & Electric Co.  Pennsylvania Power & Light Co.	Diablo Canyon 2  Susquehanna 1	Apr-26-2025 Jul-17-2022	Sep-2007 

	Hope Creek 1	Apr-11-2026	Dec-2007
Public Service Electric & Gas Co.	Salem 1	Aug-13-2016	Doc 2007
	Salem 2	Apr-18-2020	Dec-2007
Rochester Gas & Electric Corp.	Ginna	Sep-18-2009	Jul-2002
South Carolina Electric & Gas Co.	Summer 1	Aug-06-2022	Aug-2002
Southern California Edison	San Onofre 2	Oct-18-2013	Jan-2003
Company	San Onofre 3	Oct-18-2013	Jan-2005
	Edwin I. Hatch 1	Aug-06-2014	Mar-2000
Southern Nuclear Operating Co.	Edwin I. Hatch 2	Jun-13-2018	IVIAI - 2000
	Joseph M. Farley 1	Jun-25-2017	Sant 2002
	Joseph M. Farley 2	Mar-31-2021	Sept-2003
	Vogtle 1	Jan-16-2027	Jan-2013
	Vogtle 2	Feb-09-2029	Jan-2013
STP Nuclear Operating Co.	South Texas Project 1	Aug-20-2027	Aug-2013
317 Nuclear Operating Co.	South Texas Project 2	Dec-15-2028	Aug-2013
	Browns Ferry 2	Jun-28-2014	Dec-2003
	Browns Ferry 3	Jul-02-2016	Dec-2003
Tennessee Valley Authority	Sequoyah 1	Sep-17-2020	Dec-2007
	Sequoyah 2	Sep-15-2021	Dec-2007
	Watts Bar 1	Nov-09-2035	Nov-2021
TYLL Flectric Company	Comanche Peak 1	Feb-08-2030	Feb-2016
TXU Electric Company	Comanche Peak 2	Feb-02-2033	F60-2010
VT Yankee Nuclear Power Corp.	Vermont Yankee	Mar-21-2012	Jan-2003
Wolf Creek Nuclear Operating Corp.	Wolf Creek 1	Mar-11-2025	Mar-2011

Source: NRC, Information Digest, 2000 Edition, NUREG-1350, Vol.12. (Source of data in table except where noted.) <sup>a</sup> Sources for actual renewal dates are NEI's website "License Renewal" at www.nei.org/doc.asp?catnum=3&catid=14, and "License Renewal Filings: Completed and Announced" at www.nei.org/documents/License\_Renewal\_Filings.pdf, and NRC NRR staff.

# **NRC**

- NRC requires 200 hours to review one licensee's financial qualifications information.<sup>9</sup> The lower and upper bounds for this parameter are assumed to be 150 hours and 250 hours, respectively.
- The average labor rate for NRC staff is \$80.00 per hour.<sup>10</sup>

# Miscellaneous

- The analysis assumes the rule will become effective in January 2003. Based on this assumption, all future costs and savings are discounted back to January 2003, using a 7 percent discount rate.<sup>11</sup> All dollar amounts in the analysis are stated in 2002 dollars.
- The analysis uses a time horizon of 2052 for estimating the costs of electric utility to non-electric utility transitions without a license transfer. Although electric utilities may transition to non-electric utility status after 2052, due to discounting the costs back to 2003, costs incurred after 2052 will not have a material effect on the results.

# 3.3 Analysis

This section outlines the derivation of the values and impacts for the two regulatory options. Under the proposed action, each of the four attributes is discussed individually. However, some values and impacts are addressed qualitatively for reasons discussed in Section 3.2.

# 3.3.1 Option 1 - No action

By definition, this option does not result in any values or impacts.

# 3.3.2 Option 2 - Proposed Action

# Industry Implementation

**Impact:** Read the amended regulations.

• (65 reactor sites) x (4 hours per site) x (\$80.00 per hour) = \$20,800

This amount is assumed to be incurred in the year that the rule becomes effective (i.e., 2003) and thus the amount is not discounted.

<sup>&</sup>lt;sup>9</sup> The hours estimate is based on the time it takes NRR/NRC staff to review financial qualifications information submissions and render a finding.

<sup>&</sup>lt;sup>10</sup> The labor rate is based on the NRR/NRC staff average hourly rate.

<sup>&</sup>lt;sup>11</sup> A discount rate of 7 percent was used in accordance with NRC's Regulatory Analysis Technical Evaluation Handbook, NUREG/BR-0184, January 1997, page B.2.

# **Industry Operation**

Value:

Non-electric utility power reactor operating license applicants will no longer submit financial qualifications information in license renewal applications.

• (100 hours per applicant) x (\$80.00 per hour) = \$8,000 per applicant

The number of non-electric utility applicants is estimated by taking 20 percent of all expected renewal applications in each year and rounding to the nearest whole number. Exhibit 3-2 shows the lower bound, best estimate, and upper bound number of all renewal applicants and the estimated number of non-electric utility applicants for each year. The differences in the number of all applicants for the lower bound, best estimate, and upper bound shown in Exhibit 3-2 are due to the timing of the renewal application submission in relation to the initial license expiration date.

For each of the nine non-electric utility applicants in the analysis, the \$8,000 amount is then discounted back from the date of the application to January 2003. These discounted amounts are added across all nine applicants to yield a total savings of \$59,600. Exhibit 3-3 shows the number of non-electric utility applicants in each year and the licensee savings (both discounted and not discounted) associated with these applications. The lower and upper bounds for the total discounted amounts are estimated to be \$15,300 and \$235,300, respectively. In the lower bound estimate there are five non-electric utility renewal applications and in the upper bound there are 16 non-electric utility renewal applications. The lower and upper bound estimates represent the combined lower and upper bound values for the five parameters that are changed in the analysis, as described in Section 3.2.1.

# Impact:

When an electric utility to non-electric utility transition occurs that does not involve the transfer of a license, the licensee will incur a cost to prepare financial qualifications information.

• (100 hours per transition) x (\$80.00 per hour) = \$8,000 per transition

The number of transitions to non-electric utility status is estimated by assuming there is one transition every ten years for the 50 year period. Thus, in the best estimate, there are five transitions. For each of the five transitions in the analysis, this \$8,000 amount is then discounted back from the date of the transition to January 2003. These discounted amounts are added across all five transitions to yield a total incurred cost of \$15,700. Exhibit 3-4 shows the number of transitions in each year and the licensee costs (both discounted and not discounted) associated with these transitions. The lower and upper bounds for this impact are estimated to be costs of \$5,300 and \$53,900, respectively. In the lower bound estimate there are three transitions, and in the upper bound estimate there are ten transitions. The lower and upper bound estimates represent the combined lower and upper bound values for the five parameters that are changed in the analysis, as described in Section 3.2.1.

 $<sup>^{12}</sup>$  The individual amounts are discounted back to 2003 using the following formula: Discounted Savings = Savings x  $(1/(1+r)^t)$ . Where "Savings" is the undiscounted amount, "r" is the discount rate of seven percent, and "t" is the difference in time between when the application was submitted and the year 2003.

Exhibit 3-2: Number of Operating License Renewal Applications by Year

Number of Applications							
	Lower Bound		Best I	Estimate	Upper Bound		
Year	All Applications	Non-Electric Utility Applications	All Applications	Non-Electric Utility Applications	All Applications	Non-Electric Utility Applications	
2003	16	2	21	4	24	7	
2004	7	1	4	1	9	3	
2005	3	0	2	0	5	2	
2006	1	0	0	0	5	2	
2007	4	0	5	1	6	2	
2008	0	0	2	0	0	0	
2009	0	0	0	0	0	0	
2010	0	0	5	1	1	0	
2011	1	0	3	1	0	0	
2012	2	0	5	1	0	0	
2013	0	0	2	0	0	0	
2014	5	1	0	0	0	0	
2015	3	0	0	0	1	0	
2016	5	1	1	0	0	0	
2017	2	0	0	0	0	0	
2020	1	0	0	0	0	0	
2021	0	0	1	0	0	0	
2025	1	0	0	0	0	0	
Total	51	5	51	9	51	16	

Note: The years 2018, 2019, 2022, 2023, and 2024 are not included in the table because the analysis models that no renewal applications would be submitted in these years. The table stops at the year 2025 because no renewal applications are modeled to be submitted after this year. The differences in the number of applicants for the lower bound, best estimate, and upper bound are due to the timing of the renewal application submission in relation to the initial license expiration date.

Exhibit 3-3: Number of Non-Electric Utility Operating License Renewal Applications Per Year and the Savings Associated with the Applications

Year	Number of Non- Electric Utility Applications	Licensee Savings		Discounted Licensee Savings	ı	NRC Savings	1	Discounted NRC Savings
2003	4	\$	32,000	\$ 32,000	\$	64,000	\$	64,000
2004	1	\$	8,000	\$ 7,500	\$	16,000	\$	15,000
2005	0	\$	0	\$ 0	\$	0	\$	0
2006	0	\$	0	\$ 0	\$	0	\$	0
2007	1	\$	8,000	\$ 6,100	\$	16,000	\$	12,200
2008	0	\$	0		\$	0	\$	0
2009	0	\$	0		\$	0	\$	0
2010	1	\$	8,000	\$ 5,000	\$	16,000	\$	10,000
2011	1	\$	8,000	\$ 4,700	\$	16,000	\$	9,300
2012	1	\$	8,000	\$ 4,400	\$	16,000	\$	8,700
Total	9	\$	72,000	\$ 59,600	\$	144,000	\$	119,100

Note: The table stops at the year 2012 because no renewal applications from non-electric utility applicants are modeled to be submitted after this year.

Numbers are rounded to the nearest 100 and may not add to the total due to rounding.

The savings are discounted at a rate of seven percent.

Exhibit 3-4: Number of Transitions to Non-Electric Utility Status Per Year and the Costs
Associated with the Transitions

Year	Number of Transitions	Licensee Cost	Discounted Licensee Cost	NRC Cost	Discounted NRC Cost
2003	1	\$ 8,000	\$ 8,000	\$ 16,000	\$ 16,000
2013	1	\$ 8,000	\$ 4,100	\$ 16,000	\$ 8,100
2023	1	\$ 8,000	\$ 2,100	\$ 16,000	\$ 4,100
2033	1	\$ 8,000	\$ 1,100	\$ 16,000	\$ 2,100
2043	1	\$ 8,000	\$ 500	\$ 16,000	\$ 1,100
Total	5	\$ 40,000	\$ 15,700	\$ 80,000	\$ 31,400

Note: Only the years where a transition is modeled in the analysis are included in the table. Numbers are rounded to the nearest 100 and may not add to the total due to rounding.

The savings are discounted at a rate of seven percent.

# NRC Operation

Value:

NRC will no longer incur costs associated with reviewing financial qualifications information in applications for non-electric utility power reactor operating license renewals.

(200 hours per applicant) x (\$80.00 per hour) = \$16,000 per applicant

The number of non-electric utility applicants is estimated by taking 20 percent of all expected renewal applications in each year and rounding to the nearest whole number. Exhibit 3-2 shows the lower bound, best estimate, and upper bound number of all renewal applicants and the estimated number of non-electric utility applicants for each year. The differences in the number of all applicants for the lower bound, best estimate, and upper bound shown in Exhibit 3-2 are due to the timing of the renewal application submission in relation to the initial license expiration date.

For each of the nine non-electric utility applicants in the analysis, the \$16,000 amount is then discounted back from the date of the application to January 2003. These discounted amounts are added across all nine applicants to yield a total savings of \$119,100. Exhibit 3-3 shows the number of non-electric utility applicants in each year and NRC's savings (both discounted and not discounted) associated with these applications. The lower and upper bounds for this value are estimated to be \$45,900 and \$294,200, respectively. In the lower bound estimate there are five non-electric utility renewal applications and in the upper bound there are 16 non-electric utility renewal applications. The upper bound estimate is significantly higher in part because the renewal applications are submitted sooner than in the best estimate and thus yield larger savings on a discounted dollar basis. The lower and upper bound estimates represent the combined lower and upper bound values for the five parameters that are changed in the analysis, as described in Section 3.2.1.

Impact:

NRC will incur the costs associated with the review of financial qualifications information for each electric utility to non-electric utility transition not involving a license transfer.

• (200 hours per transition) x (\$80.00 per hour) = \$16,000 per transition

The number of transitions to non-electric utility status is estimated by assuming there is one transition every ten years for the 50 year period. Thus, in the best estimate, there are five transitions. For each of the five transitions in the analysis, this \$16,000 amount is then discounted back from the date of the transition to January 2003. These discounted amounts are added across all five transitions to yield a total incurred cost of \$31,400. Exhibit 3-4 shows the number of transitions in each year and NRC's costs (both discounted and not discounted) associated with these transitions. The lower and upper bounds for this impact are estimated to be costs of \$15,900 and \$67,300, respectively. In the lower bound estimate there are three transitions, and in the upper bound estimate there are ten transitions. The lower and upper bound estimates represent the combined lower and upper bound values for the five parameters that are changed in the analysis, as described in Section 3.2.1.

# Regulatory Efficiency

Value: Improved consistency of regulations and reduction in burden for non-

electric utility power reactors applying for license renewal.

# 4. Results

The quantitative results for the affected attributes, industry operation and NRC operation, are presented in Exhibits 4-1 and 4-2 by the 10 CFR sections that would be changed in the proposed action. Because the industry implementation attribute is affected by amendments to both sections this attribute is included only in the combined summary table, Exhibit 4-3. Exhibits 4-1 and 4-2 show that the benefits are due to the changes in Section 50.33(f)(2) and the costs are due to the changes in Section 50.76. The total net benefit of the proposed action is summarized in Exhibit 4-3. As these exhibits show, there are no benefits or impacts associated with Option 1 (the no-action alternative). One attribute, regulatory efficiency, could be analyzed only on a qualitative basis.<sup>13</sup> Exhibit 4-4 summarizes the qualitative results of the analysis.

Exhibit 4-1: Quantitative Results for Amendments to §50.33(f)(2) (Present Value)

Attribute	Option 1:No Action	Option 2: Proposed Action <sup>a</sup>
Industry Operation		
Values	\$0	\$59,600
Impacts	\$0	\$0
NRC Operation		
Values	\$0	\$119,100
Impacts	\$0	\$0
Total	\$0	\$178,700

<sup>&</sup>lt;sup>a</sup> Numbers may not add to the total due to rounding.

<sup>&</sup>lt;sup>13</sup> See Section 3.2 for a discussion of the reasons that quantitative analysis is not feasible for some of the affected attributes.

Exhibit 4-2: Quantitative Results for Amendments to Section 50.76 (Present Value)

Attribute	Option 1: No Action	Option 2: Proposed Action <sup>a</sup>
Industry Operation		
Values	\$0	\$0
Impacts	\$0	(\$15,700)
NRC Operation		
Values	\$0	\$0
Impacts	\$0	(\$31,400)
Total	\$0	(\$47,200)

<sup>&</sup>lt;sup>a</sup> Numbers may not add to the total due to rounding.

**Exhibit 4-3: Quantitative Results for All Amendments (Present Value)** 

Attribute	Option 1: No Action	Option 2: Proposed Action <sup>a</sup>
Industry Operation		
Values	\$0	\$59,600
Impacts	\$0	(\$15,700)
NRC Operation		
Values	\$0	\$119,100
Impacts	\$0	(\$31,400)
Industry Implementation		
Values	\$0	\$0
Impacts	\$0	(\$20,800)
Total	\$0	\$110,800

<sup>&</sup>lt;sup>a</sup> Numbers may not add to the total due to rounding.

**Exhibit 4-4: Qualitative Results** 

Regulatory Options	Qualitative Values/Impacts
Option 1: No Action	Values: None
Cpilett II He Alexant	Impacts: None
Option 2: Proposed Action	<b>Values:</b> Regulatory Efficiency - Increase in regulatory certainty, consistency, and clarity. Increase in the consistency of treatment of licensees.
	Impacts: None

Option 2 would result in both qualitative and quantitative benefits over the no-action option. The qualitative benefits include increased regulatory efficiency relative to the no-action option. In particular, Option 2 provides greater regulatory certainty and clarity than the no-action option, and would ensure consistent treatment across power reactor licensees. Greater regulatory clarity is gained because the current regulations do not address the transition from electric utility to non-electric utility status. These increases in regulatory efficiency are believed to be significant. Under Option 2, the elimination of the need for non-electric utility power reactor license renewal applicants to submit financial qualifications information is expected to save these licensees \$59,600 in preparation costs and to save NRC \$119,100 in review costs.

Option 2 also has impacts to both electric utility power reactor licensees and NRC due to a new requirement for submitting financial qualifications information. These impacts are incurred only when an electric utility power reactor licensee transitions to non-electric utility status without a license transfer. The deregulation of the electric industry makes this type of transition possible. However, the probability of such a transition occurring is expected to be low because these transitions are expected to also include a license transfer, which are addressed under Section 50.80. The new requirement is expected to cost electric utility licensees \$15,700 in preparation costs and to cost NRC \$31,400 in review costs. In addition, reviewing the new regulations would cost all power reactor licensees a total of \$20,800.

The total net benefit of Option 2 is estimated to be \$110,800. The reasonable lower and upper bounds on the net benefit are estimated to be savings of \$19,200 and \$387,600, respectively. The lower and upper bound estimates include the combined lower or upper bound values for each of the parameters varied in the analysis. Exhibit 4-5 summarizes the parameter lower and upper bound values used in the analysis.

**Exhibit 4-5: Parameter Values** 

Parameter	Lower Bound	Best Estimate	Upper Bound
Number of years prior to licensee expiration that renewal application is submitted (years)	10 yrs	14 yrs	20 yrs
NRC burden to review financial qualifications information (hours)	150 hrs	200 hrs	250 hrs
Licensee burden to prepare financial qualifications information (hours)	50 hrs	100 hrs	200 hrs
Percent of renewal applications that are from non- electric utility licensees (%)	10%	20%	30%
The number of transitions of utilities from electric utility to non-electric utility status during the 50 year analytical period	3 transitions	5 transitions	10 transitions

# 5. Backfit Analysis

The NRC has determined that the backfit rule does not apply to this proposed rule. The proposed rule would (1) permissively relax the current requirement in Section 50.33(f) for submission of financial qualifications information by entities other than electric utilities seeking renewal of their nuclear power plant operating licenses, and (2) impose a new requirement for submission of financial information on electric utilities who hold operating licenses for nuclear power reactors, who cease to be electric utilities in a manner other than a license transfer under 10 CFR 50.80. Such information collection and reporting requirements do not constitute regulatory actions to which the backfit rule applies. In addition, with respect to the permissive relaxation in § 50.33(f), such relaxations do not "impose" a requirement, which is an essential element of "backfitting" as defined in Section 50.109(a)(1).

Accordingly, the proposed rule's provisions do not constitute a backfit and a backfit analysis need not be performed. However, the staff has prepared a regulatory analysis that identifies the benefits and costs of the proposed rule and evaluates other options for addressing the identified issues. As such, the regulatory analysis constitutes a "disciplined approach" for evaluating the merits of the proposed rule and is consistent with the intent of the backfit rule.

# 6. Decision Rationale

 Option 1, the no-action alternative, with respect to non-electric utility power reactors, would retain the existing requirement for nuclear licensees to submit financial qualifications information with their renewal applications. Option 2 would remove the requirement for non-electric utility power reactors to submit financial qualifications information with their operating license renewal applications, thus reducing the burden on non-electric utility power reactor licensees. Relative to Option 1, this aspect of Option 2 would yield net benefits to licensees and NRC without additional risk to the public.

- 2. Option 1, the no-action alternative, with respect to electric utility power reactor licensees that make the transition to non-electric utility status, would retain the existing lack of a requirement for electric utilities to submit financial qualifications information during the transition process. Option 2 would establish a requirement for the submission of financial qualifications information for electric utility power reactor licensees that make the transition to non-electric utility status without a license transfer. Thus, this aspect of Option 2 may yield a net cost to licensees and NRC. Although the analysis included ten transitions in a 50 year period, due to the uncertainty that any electric utility will make the transition to non-electric utility status without a license transfer, these costs to licensees and NRC may never be incurred.
- 3. The requirement established by Option 2 would complete a set of requirements for NRC's review of financial qualifications that would allow total coverage of all relevant triggering events during the normal operating life of licensed power reactors. The relevant triggering events are initial operating licensing, license transfer to another entity, transition from electric utility to non-electric utility status, and evidence of a decline in licensee financial status. Exhibit 1-1 shows the financial qualifications submission requirements for these four triggering events. Providing this coverage of all relevant triggering events is expected to enhance public confidence.
- 4. The proposed requirements under Option 2 would result in enhanced regulatory efficiency because they would (1) provide greater regulatory certainty and clarity than Option 1, (2) ensure consistent treatment among all power reactor licensees, and (3) provide more appropriate requirements for non-electric utility power reactor licensees.
- 5. For the reasons discussed in (1) through (4) above, the proposed option is superior to the no-action alternative.

# 7. Implementation

The action would be enacted through a Proposed Rule Notice, public comments, and a Final Rule, with promulgation of the Final Rule expected by January 2003. Implementation can begin immediately following the enactment of the final rulemaking. No impediments to implementation of the recommended alternative have been identified. In addition, no Regulatory Guides for licensees are expected to be needed. Activities required of licensees by the proposed action do not qualify as backfits as discussed in Section 5.

# ATTACHMENT 3 DRAFT ENVIRONMENTAL ASSESSMENT

# Draft

# Environmental Assessment and Finding of No Significant Environmental Impact

# For Amendments to 10 CFR Part 50, Financial Information For Applications To Renew Or Extend The Term Of An Operating License For A Power Reactor

This document fulfills the Nuclear Regulatory Commission's (NRC) obligation under 10 CFR Part 51 to examine the environmental impacts of its regulatory actions, in this case regarding a rulemaking addressing NRC's financial information requirements for power reactor licensees. This action amends Section 50.33(f)(2) and adopts a new section, 10 CFR 50.76.

NRC's regulations for implementing Section 102(2) of the National Environmental Policy Act of 1969 (NEPA), as amended, are contained in Subpart A of 10 CFR 51. These regulations require that an environmental impact statement or an environmental assessment be prepared for all licensing and regulatory actions that are not classified as "categorical exclusions" under 10 CFR 51.22(c) and are not identified in 10 CFR 51.22(d) as other actions not requiring environmental review.

NRC has determined that, under Section 102(2) of NEPA, as amended, and NRC's regulations in Subpart A of 10 CFR Part 51, the proposed rule is not a major Federal action significantly affecting the quality of the human environment, and therefore an environmental impact statement is not required. NRC also has determined that the proposed rule does not qualify as a categorical exclusion or other action not requiring environmental review. Consequently, NRC has determined that an environmental assessment is required. This document presents the results of NRC's environmental assessment of the proposed rule and documents its finding of no significant impact.

# 1. Environmental Assessment

# 1.1 Identification of the Proposed Action

The proposed action would amend Section 50.33(f)(2) and create a new section, 10 CFR 50.76. The amendment to Section 50.33(f)(2) would remove the requirement for non-electric utility power reactor licensees to submit financial qualifications information with a license renewal application. The amendment to Section 50.33(f)(2) would reduce regulatory burden by eliminating unnecessary submissions of financial qualifications information. Electric utility power reactor licensees already are exempt from submitting financial qualifications information with license renewal applications. Non-power reactor licensees still are required to submit financial qualifications information. Section 50.76 would require electric utility power reactor licensees that transition to non-electric utility status, without a license transfer, to submit financial qualifications information at least 75 days before the licensee ceases to be an electric utility. The amendment to Section 50.76 would provide regulatory clarity by establishing a formal process to review

financial qualifications information when an electric utility makes a transition to non-electric utility status, without a license transfer. Currently 10 CFR 50 is silent on this issue.

# 1.2 Need for the Proposed Action

The proposed rulemaking is consistent with NRC's performance goals and will most directly impact the goals of making NRC activities and decisions more effective and efficient, while at the same time reducing unnecessary regulatory burden. The rulemaking will help advance these goals by eliminating the need for non-electric utility power reactor licensees to submit financial qualifications information with operating license renewal applications. Section 50.76 also advances these goals by addressing situations when an electric utility power reactor transitions to non-electric utility status without a license transfer, on which the current regulations are silent. The following paragraphs discuss the need for the amendments to

Sections 50.33(f)(2) and 50.76 in more detail.

Currently Section 50.33(f)(2) requires non-electric utility power reactor applicants for license renewals to submit financial qualifications information with their applications. NRC has concluded that a concomitant financial review of non-electric utility power reactor applicants for license renewal is unnecessary for the following reasons. NRC's current regulations provide for a review of financial qualifications at several stages during a license, such as at initial license application, license transfer, and at any time NRC determines the licensee's financial health requires a review. Thus the current regulations allow NRC to monitor and evaluate changes in licensees' financial status. In addition, because license renewal is not accompanied by a change in a licensee's financial condition, it does not warrant a financial review. By amending Section 50.33(f)(2) to eliminate the requirement for submission of financial qualifications information from non-electric utility power reactors renewing an operating license, NRC will remove unnecessary burden and treat all power reactor licensees consistently.

Section 50.76 will establish a formal process to review the financial qualifications of electric utility power reactors making a transition to non-electric utility status without a license transfer. NRC's current regulations do not provide for a formal process to review financial qualifications of electric utility power reactor licensees that transition to non-electric utility status in this case. The establishment of a formal review process is important because when an electric utility licensee transitions to non-electric utility status, the licensee will no longer be regulated by a state public utility commission (PUC) or the Federal Energy Regulatory Commission (FERC), both of which establish rates that ensure sufficient funds for safe operations. Non-electric utility power reactor licensees are subject to rates set by the open market. Although NRC is concerned about the impacts of deregulation on its power reactor licensees' financial condition, it has not found a consistent relationship between a licensee's financial health and general indicators of safety.\(^1\) NRC believes that establishing a formal review requirement would enhance public confidence while maintaining regulatory efficiency and effectiveness.

2

<sup>&</sup>lt;sup>1</sup> NRC's *Final Policy Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry* discusses its concerns regarding deregulation of power reactor licensees. The policy statement was published in the Federal Register, Vol. 62, No.160, August 19, 1997, page 44071.

# 1.3 Environmental Impacts of the Proposed Action

The proposed amendment modifies the requirement in Section 50.33(f)(2), for non-electric utilities seeking renewal of operating licenses for nuclear power plants, by removing the requirement for submission of financial qualifications information. This would remove the need for non-electric utilities to submit financial qualifications information with renewal applications for power reactor operating licenses. The proposed action would, therefore, place non-electric utility power reactor licensees on the same footing as electric utility power reactor licensees with respect to the license renewal process. The proposed Section 50.76, adds a requirement for utilities that transition to non-electric utility status to submit financial qualifications information as required under Section 50.33(f)(2).

NRC has determined that, under NEPA and the Commission's regulations in Subpart A of CFR Part 51, this rule would not be a major Federal action significantly affecting the quality of the human environment. The proposed action is primarily administrative in nature since it concerns the submission of information on financial qualifications. There are no significant radiological environmental impacts associated with the proposed action and it does not involve non-radiological plant effluents. NRC expects no significant environmental impact to result from this proposed rule.

# 1.4 Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the staff considered the "no-action" alternative. No action to change the rule would result in no change in current environmental impacts.

# 1.5 Alternative Use of Resources

This action does not involve the use of any different resources than those previously considered in the original rule dated January 19, 1956.

# 1.6 Agencies and Persons Consulted

The proposed rulemaking is to be published in the *Federal Register* for all interested parties to review and is being provided to State Liaison Officers. All comments received within the stated time limit will be considered in developing the final rule.

# 2. Finding of No Significant Impact

On the basis of the environmental assessment, NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the proposed rule dated XXXX. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the ADAMS Public Library component on the NRC Web site, http://www.nrc.gov/reading-rm.html (the Public Electronic Reading Room). If you do not have access to ADAMS or if there are problems in accessing the documents located in

ADAMS, contact the NRC Public Document Room (PDR) Reference Staff at 4209, or 301-415-4737, or by e-mail at <a href="mailto:pdr@nrc.gov.">pdr@nrc.gov.</a>

1-800-397-