

# RULEMAKING ISSUE (Affirmation)

November 7, 2003

SECY-03-0195

FOR: The Commissioners

FROM: William D. Travers  
Executive Director for Operations /RA/

SUBJECT: FINAL RULE, 10 CFR PART 50, "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 in the *Federal Register* a final rule on financial information requirements for licensee applicants seeking to renew or extend the term of an operating license for a power reactor.

## BACKGROUND:

On June 4, 2002, the NRC published a proposed rule in the *Federal Register* (67 FR 38427). The rule proposed to remove the requirement that non-electric utility power reactor licensees submit financial qualifications information in their license renewal applications and to add a new requirement that nuclear power reactor licensees who are electric utilities reorganizing as or changing their status to non-electric utility entities without a license transfer must notify the NRC and submit information on their financial qualifications. The proposed rule sought to reduce unnecessary regulatory burden on licensees seeking renewal of operating licenses and ensure that licensees reorganizing as or changing to non-electric utility entities continue to have financial resources to operate their facilities safely. The public comment period closed on August 19, 2002. Nine comments were received on the proposed rule.

## DISCUSSION:

After considering the public comments, the staff has decided to adopt the proposed rule unchanged as the final rule. The staff does not believe that the license renewal process, in and

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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 NRC can evaluate the financial qualifications of a proposed transferee at the time of an impending license transfer with reasonable assurance that the financial information will remain relevant for some period after the license transfer occurs. Finally, paragraph 50.33(f)(4) allows ad hoc reviews when circumstances warrant. The NRC believes that the current regulatory structure is sufficiently flexible to address unforeseen events that may trigger a review of power reactor licensee financial qualifications.

Currently, there is one gap in the NRC's regulatory provisions for evaluating a power reactor licensee's financial qualifications. The NRC's current regulations do not provide for a financial qualifications review when a licensee transitions from an electric utility to an entity other than an electric utility without transferring control of its license. This final rule will rectify the regulatory gap by imposing a requirement that these licensees submit financial qualifications information to the NRC. With the addition of this provision, the NRC believes it has a basis for concluding that it is unnecessary to review financial qualifications information during the license renewal process for non-electric utility licensees that are holders of operating licenses for nuclear power reactors.

The final rule retains the financial qualifications requirements for applicants that wish to renew or extend their licenses for nonpower reactors.

#### COORDINATION:

The Office of the General Counsel has no legal objection to the content of this paper. The Office of the Chief Financial Officer has reviewed this final rule for resource implications and has no objections. The Advisory Committee on Reactor Safeguards (ACRS) and the Committee to Review Generic Requirements (CRGR) has no objections to issuing the final rule.

#### RECOMMENDATION:

That the Commission:

1. Approve the attached notice of final rulemaking for publication in the *Federal Register* (Attachment 1).
2. Certify that the final rule does not have a significant financial impact on a substantial number of small entities. This certification is included in the attached *Federal Register* notice.

3. Note:

- a. That 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.
- b. That a final Regulatory Analysis has been prepared for this rulemaking (Attachment 2).
- c. That a final Environmental Assessment has been prepared for this rulemaking (Attachment 3).
- d. That the staff has determined that this is not a “major” rule, as defined in the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. 804(2), and has confirmed this determination with OMB.
- e. That the appropriate congressional committees will be informed of this action.
- f. That a press release will be issued by the Office of Public Affairs when the rulemaking is filed with the Office of the Federal Register.
- g. That copies of the *Federal Register* notice of final rulemaking will be distributed to all power reactor licensees. The notice will be sent to other interested members of the public upon request.

***/RA William F. Kane Acting for/***

William D. Travers  
Executive Director  
for Operations

Attachments:

1. *Federal Register* Notice
2. Regulatory Analysis
3. Environmental Assessment

**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:** Final rule.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) is amending its regulations to remove the requirement that non-electric utility power reactor licensees submit financial qualifications information in their license renewal applications, and to add a new requirement that electric utility licensees of nuclear power reactors who become non-electric utility entities without a license transfer must notify the NRC and submit information on their financial qualifications. The final rule will reduce unnecessary regulatory burden on licensees seeking renewal of operating licenses and ensure that licensees that become non-electric utility entities continue to be financially qualified to operate their facilities and maintain the public health and safety.

**EFFECTIVE DATE:** (Insert date 30 days after the date of publication).

**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](mailto: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), adopted on September 12, 1984 (49 FR 35747), 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. The exception for electric utilities was based on the premise that the cost-of-service ratemaking process ensures that electric utilities will have funds to operate their nuclear power plants safely. Because entities other than electric utilities do not have recourse to such 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 non-electric utility entities under § 50.57(a)(4).

In its 1991 License Renewal Rule, 10 CFR Part 54 (56 FR 64943; December 13, 1991), the NRC reaffirmed that the basis of the 1984 rulemaking for eliminating financial qualifications reviews 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). The License Renewal Rule left unchanged the requirement in § 50.33(f)(2) that license renewal applicants that are not electric utilities must submit financial qualifications information in their renewal applications. However, the section of the License Renewal Rule that contains the standards for issuance of a renewed license, 10 CFR 54.29, does not require a finding regarding financial qualifications for non-electric utility entities applying for license renewal. The revisions to 10 CFR Part 54 published on May 8, 1995 (60 FR 22461), did not amend the requirements in 10 CFR 54.29. Thus, while non-electric utility entities are required to submit financial qualifications information under 10 CFR 50.33, there is no requirement under 10 CFR 54.29 for a finding of financial qualifications for non-electric utility entities.

Since the 1995 rulemaking, the NRC has received 17 requests for license renewals and has granted 14 renewed licenses for seven plant sites to electric utilities. However, because of ongoing deregulation in the power market, new entities other than electric utilities may be created and become licensees of nuclear power plants. Some of these entities may decide to renew their licenses. Under the current rule, these entities would be required to submit financial qualifications information under § 50.33(f)(2).

NRC's case-by-case determination of financial qualifications is resource-intensive and may result in delays in approving renewal applications. The NRC has reviewed the license transfer process to determine if there is a basis in the regulatory process that would eliminate the need for such a finding at license renewal. The NRC determined that, with one exception, it does not need the financial qualifications information from license renewal applicants that are not electric utilities. The exception is when an existing nuclear power licensee transitions from an electric utility to an entity other than an electric utility without transferring its license. All

license transfers involving non-electric utility applicants require consideration of the financial qualifications of the non-electric utility entity that holds or will hold the license. However, an electric utility licensee transitioning to a non-electric utility status *without* a license transfer would not be subject to an NRC review of financial qualifications for the licensee as a non-electric utility entity under current NRC rules. If not closed, this regulatory gap would prevent the NRC from making a generic determination that financial qualifications review is unnecessary at license renewal.

On June 4, 2002, the NRC published a proposed rule in the *Federal Register* (67 FR 38427). The rule proposed to remove the requirement that non-electric utility power reactor licensees submit financial qualifications information in their license renewal applications, and to add a new requirement that licensees of nuclear power reactors who are electric utilities reorganizing as or changing their status to 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 on licensees seeking renewal of operating licenses and ensure that licensees reorganizing as or changing to non-electric utility entities continue to have financial resources to operate their facilities safely. The public comment period closed on August 19, 2002. Nine comments were received on the proposed rule.

### **Discussion**

After considering public comment, the NRC has decided to adopt the proposed rule unchanged as the final rule. The final rule will remove the requirement that non-electric utility power reactor licensees submit financial qualifications information in their license renewal applications. The final rule will also add a new requirement that licensees of nuclear power reactors who are electric utilities reorganizing as or changing their status to non-electric utility entities without a license transfer must notify the NRC and submit information on their financial qualifications. The final rule reduces unnecessary regulatory burden on licensees seeking

renewal of operating licenses and ensures that licensees reorganizing as or changing to non-electric utility entities continue to be financially qualified to operate their facilities and maintain the public health and safety. These changes will increase regulatory clarity and strengthen the NRC's ability to protect public health and safety. The following discussion presents the basis and rationale for this action.

The NRC's regulations provide for an evaluation of the financial qualifications of an applicant for a nuclear power reactor operating license or a licensee at several points during a reactor's operating lifetime - at initial licensing, before license transfers, and when circumstances warrant an ad hoc request for additional financial information. In addition, the NRC monitors the financial trade press and other sources for information on licensees' financial situations.

Currently, there is one gap in the NRC's regulatory provisions for evaluating a power reactor licensee's financial qualifications. The NRC's current regulations do not require a financial qualifications review when a licensee transitions from an electric utility to an entity other than an electric utility without transferring control of its license. This final rule will rectify the regulatory gap by imposing a requirement that these licensees submit financial qualifications information to the NRC. With the addition of this provision, the NRC believes it has a basis for concluding that non-electric utility licensees that are holders of operating licenses for nuclear power reactors need not submit financial qualifications information during the license renewal process.

With this final rule, the NRC believes that review of financial qualifications of non-electric utility licensee applicants at license renewal is not necessary. The resulting process for oversight of financial qualifications is sufficient to ensure that the NRC has adequate warning of adverse financial impacts so that the NRC can take timely regulatory action to ensure public health and safety and the common defense and security. The resulting process has two components: (1) a formal review of major triggering events, and (2) monitoring of financial



health between the formal reviews due at the “triggering events.” The relevant triggering events are (1) initial operating license application, (2) license transfer, and (3) transition from an electric utility to a non-electric utility, either with or without transfer of control of the license. In addition, the NRC can review a licensee’s financial qualifications at any point during the term of the license if there is evidence of a decline in the licensee’s financial health. The NRC believes that there are no unique financial circumstances associated with license renewal because the NRC has no information indicating a licensee’s revenues and expenses change due to license renewal.

Between major triggering events, the NRC relies upon periodic monitoring of the financial health of licensees to detect whether additional regulatory scrutiny and action are necessary to assure public health and safety and the common defense and security. The NRC’s current regulations require non-electric utility reactor licensees to submit 5 years of financial projections for license renewal applications. Because this financial qualifications information ages quickly and is of limited relevance years later, the NRC relies on a process of monitoring licensees throughout the term of their licenses for any indications that they may not have sufficient financial resources to operate their plants safely.

The current licensee monitoring process involves the review of financial and industry trade press as well as other publicly available information, such as Securities and Exchange Commission (SEC) submissions and Federal Energy Regulatory Commission (FERC) submissions. The NRC reviews this information to identify changes in licensees’ financial health, as well as indirect indicators of declining financial health such as layoffs or increasing technical problems. If the review of any of these sources indicates that a licensee’s financial health may be deteriorating, the NRC can request additional financial information from the licensee as authorized by 10 CFR 50.33(f)(4) to confirm that a licensee has the financial resources to operate the facility safely. The financial information that the NRC can request

under 10 CFR 50.33(f)(4) can be the same type of information required for an initial license application or a license transfer.

The following sections discuss the times in a licensee's term of license when financial qualifications are reviewed and the changes made by this final rule.

### Initial Licensing Reviews

The NRC performs financial qualifications reviews during initial licensing because the startup of a nuclear power reactor is a major financial undertaking that has significant implications for a company's financial health. The NRC's financial qualifications review process is contained in NUREG-1577, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance," March 1999. 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 5 years of operation of the facility and to indicate the sources of funds to cover these costs. The NRC's 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. In addition, the NRC considers current information from several major financial rating service publications, and other relevant information, may also be considered. As part of its evaluation, the NRC reviews the reasonableness of an applicant's assumptions and inputs to its projections. The NRC publishes the results of its evaluation in a safety evaluation report. The NRC's regulations do not require additional financial qualifications reviews at scheduled intervals.

## License Transfer Reviews

The NRC reviews financial qualifications during direct license transfers because a new licensee must be qualified to hold the license. A plant acquisition or the indirect transfer of a license through a transfer of control of a licensee can have significant implications for a licensee's financial health. A license transfer under 10 CFR 50.80 may occur at any time during the period of the license. The NRC 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 occurring in connection with a merger, acquisition, or restructuring action. For license transfers, a non-electric utility applicant must submit all the information required under § 50.33(f). As with initial license financial qualifications reviews, the NRC uses NUREG-1577 as the basis for its review and publishes the results of its evaluation in a safety evaluation report. The NRC has performed financial qualifications reviews on over 75 license transfer applications in the last 5 years. The NRC expects that it will continue to review numerous licensees' financial qualifications in the next few years because of license transfers.

## Reviews of Transition From an Electric Utility to a Non-Electric Utility

The NRC will review financial qualifications when an electric utility licensee transitions to non-electric utility status without a license transfer because a licensee is no longer ensured the recovery of its costs through traditional cost-of-service rate regulation. Before this final rule, the NRC had no formal automatic process to evaluate the licensee's financial qualifications if such a transition occurred in the absence of a license transfer (although the NRC's monitoring process should identify such transitions and could trigger a request for additional information

pursuant to § 50.33(f)(4)). Therefore, the NRC is promulgating 10 CFR 50.76, a requirement separate from § 50.33(f)(2). Section 50.76 requires licensees that are transitioning from an electric utility to non-electric utility status, without being required to request approval for 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 will ensure that a financial qualifications review for non-electric utilities results from all relevant triggering events, thereby enhancing public confidence while maintaining regulatory efficiency and effectiveness. The relevant triggering events are (1) initial operating license application, (2) license transfer, and (3) transition from an electric utility to non-electric utility status without a license transfer.

Section 50.76 is created separately from § 50.33, because the latter section focuses on applicants rather than licensees.

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

To keep abreast of deregulation and other developments potentially affecting power reactor licensees, the NRC regularly screens the financial and trade press (e.g., Wall Street Journal, Barron's, Nuclear NewsLink, and Nuclear Energy Insight). Other information sources (e.g., State legislative reports, SEC and FERC submissions) also can be used. The NRC uses the foregoing to identify changes in licensees' financial health. A main purpose of this information review is to provide NRC with sufficient notification so that it can take regulatory action in a timely manner, when necessary. The NRC can then request additional information from licensees under § 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 their qualifications to manage licensed activities safely at any time. The requested additional information can then be used to conduct a thorough financial qualifications review.

#### 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. There are currently 37 nonpower reactor licensees. Nonpower reactor licenses are generally renewed for 20 years. The NRC does not normally follow changes in NPR licensee financial qualifications because NPR owners are primarily financially stable nonprofit educational or research institutions, either privately owned (3 corporate licensees and 28 academic licensees), State-owned (1 licensee), or Federally owned (5 licensees), and generally do not report financial information to sources readily available to the NRC. The limited publicly available reporting from these types of owners does not permit the same level of ongoing financial qualifications oversight as with power reactor licensees. Additionally, license transfers for NPRs and the associated financial reviews are rare. Given these factors, financial qualification problems with NPR licensees are not as likely to become known as problems with power reactor licensees. In some cases, the NRC has found financial weaknesses or ambiguities during NPR license

renewals that it would not have discovered otherwise. Therefore, the NRC considers it appropriate to continue to review the financial qualifications of NPR licensees when they apply to renew their licenses.

## Conclusion

Section 50.33(f) requires all non-electric utility applicants for initial and renewed operating licenses, and § 50.80, in conjunction with § 50.33(f), requires all non-electric utility applicants for transferred licenses, to submit financial qualifications information. The NRC does not believe that there are any financial circumstances uniquely associated with license renewal that warrant a separate financial review. The NRC's regulatory processes for financial qualifications reviews adequately ensure that the NRC can take appropriate and timely regulatory action when warranted by changes in a licensee's financial qualifications. In contrast, there are valid regulatory reasons for conducting specified financial qualifications reviews at other license stages. The license stages are (1) at initial licensing, when an applicant's financial qualifications need to be determined in accordance with the AEA's requirements; (2) at the time of a license transfer, when new licensees need to be evaluated, or when deregulation initiatives may affect an applicant's or licensee's financial qualifications; or (3) during special circumstances, when ad hoc reviews under § 50.33(f)(4) may be warranted.

As a result, the NRC is promulgating a change in 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 final rule (1) eliminates the need for such entities to provide financial qualifications information as part of the license renewal process, (2) retains the existing requirement in § 50.33(f) for nonpower reactors to provide financial qualifications information, and (3) adds a new § 50.76, "Licensee's change of status; financial qualifications." Section 50.76 will require that any electric utility power reactor licensee that becomes an entity

other than an electric utility without transferring control of the license must provide the same financial information that is required for obtaining an initial operating license. The final rule will not affect the submission of financial qualifications information and the need for a finding of financial qualifications to the extent presently required for license transfers.

The NRC believes this final rule is consistent with the NRC's Strategic Goals of making NRC activities and decisions more effective and efficient and reducing unnecessary regulatory burden. The final rule will 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 will 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 final rule will 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.

### **Resolution of Public Comments**

The NRC received comments on the proposed rule from nine different organizations, including one State, three nonprofits, and five organizations in the nuclear power industry. Five commenters opposed the changes to § 50.33 and four commenters supported the changes to § 50.33. Two commenters opposed adding the new § 50.76, three commenters supported this change, and four commenters were silent on the creation of the new § 50.76. After considering the public comments, the NRC has decided to adopt the proposed rule on "Financial Information Requirements for Applications To Renew or Extend the Term of an Operating

License for a Power Reactor” as final without changes. A summary of the comments and the NRC's responses follows:

*Comment 1:* Four commenters support the NRC’s proposed revisions to 10 CFR 50.33 to eliminate the requirement that non-electric utility power reactor licensees submit financial qualifications information during license renewal. One commenter agrees with the NRC’s assessment that there are no unique financial circumstances associated with license renewal that warrant a separate financial review.

*Response:* No response necessary.

*Comment 2:* Two commenters agree with the proposal to add a requirement in 10 CFR 50.76 that electric utilities that transition to non-electric utility status without a license transfer should submit financial qualifications information.

*Response:* No response necessary.

*Comment 3:* Five commenters oppose the NRC’s proposal to eliminate submission of financial qualifications information for non-electric utilities during license renewal. One commenter expresses concern that the changes to 10 CFR 50.33 would weaken protection of public safety. Another commenter states that eliminating this requirement will create an “information vacuum” that will place the NRC in a state of ignorance.

*Response:* The NRC disagrees that the changes to 10 CFR 50.33 will weaken protection of public health and safety or deprive the NRC of necessary information. The NRC’s license transfer reviews have provided the NRC with financial information on current non-



electric utility licensees, and will continue to do so for future license transfers. Moreover, the NRC's current process for monitoring the financial health of licensees, as previously described, is effective in ensuring that licensees have adequate financial resources to operate their facilities safely and provides sufficient information to allow the NRC to take timely regulatory action if a licensee's financial health deteriorates.

The commenter implies that the changes to 10 CFR 50.33 will allow financially weak licensees to continue to operate. The changes to 10 CFR 50.33 relate to when NRC reviews the financial status of licensees, not necessarily whether the licensee should continue to operate. The NRC believes that its primary tool for evaluating and ensuring safe operations at nuclear power reactors is through its inspection and enforcement programs, which are not affected by this rulemaking.

*Comment 4:* Two commenters are concerned that in the wake of recent corporate financial and accounting scandals, the NRC is considering relaxing its financial oversight of non-electric utility power reactor licensees. One commenter also states that Congress has acknowledged the need for more stringent oversight of corporate accounting and that the NRC's actions are incompatible with Congress's findings.

*Response:* The NRC disagrees with the commenters that this action is incompatible with recent experience or Congress's findings about the need for careful oversight. The commenters appear not to understand that the NRC's purposes and responsibilities are different from agencies, such as the Securities Exchange Commission (SEC), that are responsible for oversight of companies with respect to accounting or financial reporting improprieties. The NRC has no regulatory authority over corporate accounting methods. This action in no way relaxes the NRC's regulations that require all Part 50 applications to be submitted under oath and affirmation (see 10 CFR 50.30) and that require all information

submitted to be complete and accurate in all material respects (see 10 CFR 50.9). The NRC continues to possess the authority to impose sanctions for the submission of incomplete or inaccurate information. The NRC does not believe that this action has any relationship to recent financial reporting and accounting issues cited by the commenters.

*Comment 5:* One commenter states that in a U.S. General Accounting Office (GAO) report on the Commonwealth Edison and PECO merger, GAO pointed out that the NRC did not validate submitted information and the NRC approved the license transfers associated with the merger knowing that submitted pro forma financial information was inaccurate.

*Response:* The NRC disagrees with the comment and believes that the comment is not relevant to this rulemaking. NRC's response to the GAO findings is contained in the GAO report.

*Comment 6:* One commenter cites an NRC document (NUREG/CR-6617, October 1998) that suggests the NRC believes the financial health of power reactor licensees may suffer from deregulation. According to one commenter, the document suggests that the economic pressures in a deregulated environment might hasten the closure of some power reactors. The commenter asserts that the fact that the NRC now believes that financial qualifications reviews are not necessary during license renewal is incompatible with the earlier findings.

*Response:* The NRC disagrees that this action is incompatible with the information in NUREG/CR-6617. The NRC is concerned with assuring that operating reactors are operated safely. If financial circumstances force reactors to cease operation, the NRC has other requirements in place with respect to decommissioning funds that provide reasonable

assurance that a prematurely shutdown reactor is decommissioned and does not pose a public health and safety risk. The NRC's licensee monitoring process, as previously described, will provide adequate warning to ensure that the NRC can respond with timely regulatory action if a licensee's financial health suffers from deregulation. The license renewal application event has no particular bearing on a licensee's financial qualifications. If anything, undertaking to renew a license suggests that the licensee is projecting future profitability by continuing to operate the plant beyond its original operating license.

*Comment 7:* Three commenters are concerned that the NRC's reliance on trade press information is inadequate to track the financial health of non-electric utilities. One commenter states that since power reactor licensees operate in a competitive environment, they generally do not disclose financial information unless required to do so. The commenter states that as a minority owner of two power reactors, it has difficulty monitoring the financial qualifications of the plant operators. In addition, since power reactor licensees are generally organized as part of a complex holding company system, the trade press does not have sufficient information to report at a level below the holding company as a whole. One commenter states that the day-to-day informal monitoring of the trade press and limited annual reviews are not substitutes for a formal, rigorous, and disciplined review of a licensee's financial qualifications at license renewal.

*Response:* The NRC disagrees with the commenter's views that the NRC's processes are inadequate to monitor the financial health of non-electric utilities. As previously described, the NRC not only relies upon the trade press and licensee filings with other government agencies, it also has the benefit of having onsite inspectors who may become aware of relevant information. Moreover, the NRC has the authority to request additional financial information directly from licensees at any time under 10 CFR 50.33(f)(4).

Monitoring the trade press is a common practice in the financial and investment community to screen the financial and business conditions of any business activity or entity. The NRC believes that its ongoing licensee financial monitoring process is necessary and is a better use of the NRC's resources than a formal financial qualifications review at license renewal because license renewal occurs at an arbitrary point in time during a licensee's operating license. On average, power reactor licensees apply for license renewal 14 years before their initial license expires. Thus the 5 years of projected operating expenses and revenues that non-electric utility power reactors are currently required to submit do not include the period to be covered by the renewed license. Therefore the information submitted is of limited value to the NRC in determining if the licensee will have adequate financial qualifications in the period to be covered by the renewed license.

The NRC does not agree that the situation of a minority owner with respect to financial information is the same as the situation of the NRC. The NRC possesses regulatory authority under § 50.33(f)(4) to obtain additional financial information from licensees at any time that is necessary to determine whether a licensee continues to be financially qualified.

*Comment 8:* One commenter states that the aging of power reactors requires more, not less, financial oversight. The commenter cites the examples of corrosion in the reactor vessel head at the Davis-Besse reactor and cracking of reactor pressure vessel head penetration nozzles in pressurized water reactors. The commenter also states that as reactors age, licensees have conflicting demands of keeping the reactors operating and temporarily shutting them down to make necessary inspections and repairs. Licensees in poor financial health may be more likely to postpone these inspections and repairs, increasing the likelihood of an accident.

*Response:* The NRC disagrees with the commenter. The rule eliminates the burden of the unnecessary financial review so that the NRC can focus more resources on the technical aspects of power reactor license renewal. The Davis-Besse example cited by the commenter is principally a technical issue. Moreover, there does not appear to be any information available to the NRC that suggests that the Davis-Besse situation was caused by a deterioration in the financial health of the licensee, and the commenter does not present any information today to show such a causal link. The NRC has not found a consistent correlation between licensees' poor financial health and poor safety performance. If a licensee postpones inspections and repairs that are subject to NRC oversight, the NRC has the authority to shut down the reactor or take other appropriate action if there is a safety issue.

*Comment 9:* Three commenters are concerned that non-electric utility power reactor licensees are organized as single-asset limited liability companies (LLCs), which they assert are designed to limit the liability of the parent companies in the event of the financial failure of the LLC and to shield the power reactor licensee from public scrutiny of its finances. One commenter states that, in some cases, the LLCs are foreign companies or exist only on paper. Another commenter states that a recent report shows that 25 power reactors are owned by LLCs. Another commenter states that the selection of the limited liability structure indicates that these owners recognize that their financial health is subject to substantial change. Because financial well-being is essential for power reactor licensees, this structure also signals a significant risk to the health and safety of the public.

*Response:* While LLCs provide limits on the liability of parent organizations, the same is true for traditional corporations that have parent companies. Regardless of whether a power reactor licensee is an LLC or another corporate form such as a wholly owned corporate subsidiary, the NRC has essentially the same opportunity to obtain relevant financial

information about the licensee. The NRC may request and review, on a case-by-case basis, relevant financial information from the LLC licensee as authorized under 10 CFR 50.33(f)(4).

The NRC has not identified a basis for the commenter's view that the use of the LLC structure indicates licensees anticipate substantial changes in financial health. In any event, the NRC can shut down any reactors that are not operated safely, regardless of whether the licensee owner or operator is organized as an LLC or has another organizational structure. Furthermore, the use of LLCs by licensees is not relevant to the point in time that NRC reviews the financial qualifications of non-electric utilities, which include corporate forms other than LLCs.

*Comment 10:* Two commenters state that because non-electric utility licensees lack the assured base of funding of electric utility licensees, they increase the risk that there will be insufficient capital resources to operate the power reactor safely, as the non-electric utility licensees diversify into telecommunications, commodity and energy trading, high-risk financial activities, or other activities.

*Response:* The NRC disagrees with the commenters. The NRC has long determined that non-electric utilities can be licensed regardless of the fact that they do not have an assured base of funding. In this regard, the NRC has a full regulatory regime for licensing non-electric utilities. In addition, the NRC has no basis for concluding that diversification will always threaten the financial well being of non-electric utility power reactor licensees.

*Comment 11:* One commenter states that disclosure and transparency to regulators is essential for ensuring that the NRC is not caught unaware of a deteriorating financial condition. Given the lack of transparency in the structures and finances of many publicly traded energy

companies, the NRC seems out of step with the widely agreed-upon need for increased corporate disclosure.

*Response:* The NRC agrees that the NRC needs to be aware of changes in the financial condition of licensees and therefore, continues to monitor licensees' financial health. The NRC does not believe that the action being taken is somehow "out of step" with the "need for increased corporate disclosure" or inconsistent with the NRC's ability to obtain relevant corporate financial information. This action only removes one requirement to provide certain financial information at one point in time; it does not affect in any way the NRC's ability to require the submission of additional or more detailed financial information at any time the NRC considers the need such information appropriate.

*Comment 12:* One commenter believes that the NRC's current review of financial qualifications at initial licensing, before license transfers, and on an ad hoc basis is not adequate. The commenter states that the financial qualifications of a licensee at either initial licensing or at license transfer may have little relevance to the licensee's financial qualifications many years later when license renewal is sought. Because of our dynamic economy, a company's financial status can change significantly in a matter of months and thus several-year-old financial information is worthless.

*Response:* The commenter essentially is questioning the entire NRC financial qualifications regulatory process because the argument that financial information quickly becomes stale applies whether or not there is any decision to renew a license. The NRC agrees with the commenter that financial qualifications information eventually becomes out of date and is no longer relevant after the passage of time. That is the reason why the NRC has a two-pronged process for financial qualifications, with the second prong being continued

monitoring of the financial health of licensees. This process provides a reasonable method to keep abreast of licensees' financial health to safely operate nuclear power plants and resources for funding decommissioning. For power reactor licensees, financial qualifications reviews at license renewal, which takes place at an arbitrary point in time, do not solve the problem raised by the commenter.

*Comment 13:* Three commenters state that license renewal is a particularly appropriate time to evaluate the financial requirements of power reactor licensees. The commenters state that non-electric utility power reactor licensee financial qualifications should be evaluated to ensure that there are sufficient financial resources to continue safe operation, make capital improvements, add spent fuel storage capacity, meet additional licensing conditions imposed because of September 11, 2001, events, meet decommissioning obligation, and meet public liability obligations under the Price-Anderson Act, in light of the economic conditions at the time of renewal.

*Response:* The NRC disagrees with the commenters' view that license renewal is a particularly appropriate time for a financial qualifications review given that it is just one point in time over potentially 60 years of plant operation. The NRC's process for regular monitoring of power reactor licensees meets the need to know whether licensees may not have sufficient financial qualifications and allows for adequate warning so that the NRC can request financial qualifications information and take regulatory action in a timely manner if necessary. With respect to the scope of financial qualifications analyses, the NRC is not proposing any changes to its financial qualifications analyses through this action.

*Comment 14:* One commenter states that the same rationale used for maintaining the requirement for nonpower reactor licensees to submit financial qualifications information during



license renewal applies to non-electric utility power reactors. The commenter notes that the NRC states in the proposed rule (67 FR 38429) that it has found financial weaknesses or other ambiguities during the review of nonpower reactor licensees' financial information in the license renewal process that it would not have discovered otherwise. The commenter states further that given the lack of information in the trade press about non-electric utility power reactors and because of the use of LLCs, a formal review process at the time of license renewal may disclose financial weaknesses that otherwise would not be discovered.

*Response:* The NRC disagrees that the same rationale used for nonpower reactor licensees applies to non-electric utility power reactor licensees. There are many nonpower reactor licensees that are nonprofit educational or research institutions, with either private, State, or Federal ownership, that do not report financial information to sources readily available to the NRC. Thus the NRC is not as able to monitor the financial health of these organizations on an ongoing basis. In addition, many nonpower reactor licensees are multipurpose, non-revenue-generating entities that require outside funding for financial support and thus are economically more risky. Accordingly, the NRC will continue to perform financial qualifications reviews as part of the renewal of nonpower reactor licensees, which typically occurs every 20 years. On the other hand, power reactor licensees are single-purpose, revenue-generating entities. Therefore, the NRC is able to review non-electric utility power reactor licensee financial information more readily on an ongoing basis.

*Comment 15:* One commenter states that the NRC should establish a more rigorous financial monitoring system that includes an annual review by the NRC of licensees' account books. The commenter states that the NRC needs to know the financial status of non-electric utility power reactor licensees before the information is published in the trade press.

*Response:* The NRC disagrees with the comment. The extensive annual financial audit process that the commenter suggests is not necessary for the NRC to achieve its oversight of licensees under the Atomic Energy Act and to ensure public health and safety and promote the common defense and security. Nor is it clear why the NRC must know the financial status of non-electric utility licensees before information on their financial health is published in the trade press. The NRC's regulations require that all Part 50 applications be submitted under oath and affirmation (see 10 CFR 50.30) and that all information submitted must be complete and accurate in all material respects (see 10 CFR 50.9). The NRC also possesses the authority to impose sanctions for incomplete or inaccurate information and, of course, possesses the authority to take action necessary to ensure the safe operation of nuclear facilities. For these reasons, the NRC believes its regulatory process and its financial monitoring system are adequate and sufficient to meet these goals.

*Comment 16:* One commenter states that the Regulatory Analysis disregards the value to the public health and safety of reviewing a non-electric utility power reactor licensee's financial qualifications at the time of license renewal.

*Response:* The NRC disagrees with the commenter that the Regulatory Analysis disregarded the value to public health and safety of review of financial qualifications at the time of license renewal. The financial qualifications review for power reactor relicensing occurs at an arbitrary point in time that has no distinct link to public health and safety. Public health and safety are primarily protected through the NRC's onsite inspection program.

*Comment 17:* One commenter states that the NRC is not sufficiently independent of the industry that it regulates. The commenter mentions that the NRC has stated that case-by-case review of financial qualifications information might delay the approval of a license application.

The commenter suggests this gives the impression that the NRC believes its duty is to approve renewal applications and not to thoroughly review and analyze them prior to accepting or rejecting applications. The commenter concludes that the license renewal process should be a truly rigorous process and not simply a rubber-stamping formality.

*Response:* The NRC disagrees with the comment that NRC is not sufficiently independent of the industry. The NRC is a fully independent regulator of the nuclear power industry. No licensing application's approval is a foregone conclusion. The NRC will continually conduct technical reviews until the licensee has performed all necessary actions as required in the regulations before approving a license application. No licensing action is approved until all technical issues have been addressed. The NRC's commitment to thorough review and analysis of license renewal applications is reflected in the staff time to review those applications, which is on the order of 19,000 person-hours per application.

Nonetheless, to be an effective regulator, the NRC must also conduct its regulatory activities in protecting public health and safety and the common defense and security in a manner that is efficient and does not impose unnecessary regulatory burdens. This final rulemaking is directed towards ensuring that the NRC carries out its regulatory responsibilities in an efficient and cost-effective manner.

*Comment 18:* One commenter stated that the proposed regulatory language in § 50.76 is open ended and could cause confusion at the end of the 75-day period. The commenter suggested the following language should be added: "Financial qualifications information submitted in accordance with this section shall be regarded as accepted by the Commission upon receipt of a letter to this effect from the appropriate reviewing office of the Commission or 75 days after the submittal to the Commission, whichever occurs first."

*Response:* The NRC disagrees with the proposed addition. The NRC believes that the regulatory language is clear that information must be submitted no later than 75 days before an electric utility licensee ceases to be an electric utility. The commenter's proposal would change the regulation and require the NRC to take action within 75 days.

*Comment 19:* Two commenters disagree that there is a regulatory gap that must be filled by the addition of 10 CFR 50.76. One commenter states that the NRC has sufficient existing authority under 10 CFR 50.33(f)(4) to require applicants or licensees to submit financial qualifications information. In addition, licensees have an obligation to inform and obtain approval from the NRC for any changes that would constitute a transfer of license, and licensees must promptly report financial qualifications information that may have a significant implication for public health and safety. Therefore, the commenter believes the new requirement is unnecessary and unjustified. One commenter believes the new requirement is unnecessary and unwarranted and that the gap is perceived and not real since no problems were cited by the NRC. Thus, the new requirement is not necessary and would create only unnecessary burden with no benefit.

*Response:* The NRC disagrees with the commenters regarding the absence of a regulatory gap. The NRC believes that the transition from an electric utility to a non-electric utility is a significant event that requires regulatory review to ensure continued financial qualifications of the licensee lacking assured cost recovery. The fact that the NRC has authority to *request* financial qualification information is of no relevance in determining whether there is a regulatory gap. In the NRC's view, the regulatory gap exists because the current regulatory regime does not compel that the NRC be timely informed of changes in a licensee's cost recovery status when there is no license transfer. Because such notification would, in all likelihood, be followed by an NRC request for information, the final rule simply provides that

electric utility licensees transitioning to non-electric utility status without a license transfer must provide the relevant financial qualifications information. The NRC also disagrees that the regulatory gap is only perceived because no problems have occurred to date. The lack of examples of problems does not support the conclusion that a regulatory gap does not exist. With this regulation, the NRC is being proactive and is attempting to prevent problems from occurring.

*Comment 20:* One commenter opposes the addition of 10 CFR 50.76 and states that the proposed rule would impose unnecessary regulatory costs due to collecting and submitting financial qualifications information and that this added burden may impact licensees' business decisions about whether to seek license renewals.

*Response:* The NRC disagrees with the commenter that the creation of 10 CFR 50.76 is unnecessary. The NRC strives to ensure that its regulations meet real regulatory needs and that unnecessary regulations are avoided. Consistent with this objective, the NRC believes that the proposed action is necessary to ensure NRC fulfills its regulatory responsibilities under the Atomic Energy Act. This change complements the existing regulations requiring power reactor licensees to submit financial qualifications information when they become non-electric utilities during a transfer of control of a license. Thus, under the final rule all licensees that transition from electric utilities to non-electric utilities will undergo financial qualifications review, regardless of whether the transition involves the transfer of control of an NRC license. Nor does the NRC believe that the cost of collecting and submitting the information to the NRC (see Regulatory Analysis for a discussion of the projected costs of compliance with the final rule) will affect a licensee's decision on whether to seek renewal of its operating license in any material way.

*Comment 21:* One commenter states that the new requirement at 10 CFR 50.76 is unnecessary because (1) licensees have an obligation to inform, and obtain advanced approval from, the NRC of any changes that would constitute a transfer of the license, directly or indirectly, (2) licensees have an obligation to inform the NRC if changes in their financial qualifications may have significant implications for public health and safety, and (3) the NRC monitors the financial and industry trade press.

*Response:* The NRC disagrees with the commenter that the creation of 10 CFR 50.76 is unnecessary. Licensees' obligation to inform and obtain prior NRC approval of a license transfer is separate from the issue of the need for licensee notification and provision of information about financial qualifications when a licensee changes its status from an electric utility to a non-electric utility *without* an associated transfer of control of the license. Although licensees have an obligation to report significant changes in their financial qualifications, it is possible that some licensees could believe that they will remain financially qualified notwithstanding their change in status from an electric utility to a non-electric utility and thus not consider that event to be a reportable change in financial qualifications. Furthermore, while the NRC monitors the financial and industry trade press, the NRC believes that a licensee transition from electric utility to non-electric utility status is a significant event that automatically warrants a separate financial qualifications review. This type of review already occurs when the transition is associated with a license transfer. Section 50.76 would simply ensure that financial qualification reviews occur as part of a transition from an electric utility to non-electric utility status without a license transfer.

*Comment 22:* One commenter states that the new section creates additional regulatory issues and burdens without any corresponding safety benefit. A complicating issue that might arise is determining precisely what types of changes would cause a licensee to cease being an

electric utility. The NRC and the licensee may disagree that a triggering event has occurred. If so the licensee may not notify the NRC before the 75-day deadline.

*Response:* The NRC disagrees with the commenter that the new section creates additional regulatory issues and burdens without any corresponding benefit. The benefit of this action is ensuring on at least one occasion that a licensee who transitions from electric utility to non-electric utility status without a license transfer will continue to have the resources necessary to operate the power plant in a manner that protects public health and safety and is consistent with the common defense and security.

With respect to disagreement on what constitutes a transition from electric utility to non-electric utility status, the commenter did not provide any discussion of such circumstances. The NRC is unaware of any significant misunderstandings of what constitutes an electric utility under 10 CFR 50.2. Therefore, the commenter does not appear to raise a significant issue.

*Comment 23:* One commenter suggests that, instead of the proposed regulatory changes, the NRC should update the definition of “electric utility” in 10 CFR 50.2 to reflect the changes that have occurred in the electric utility industry. For example, the definition should provide flexibility to include utilities that may no longer be subject to cost of service rate making. The commenter also suggests that the definition should be flexible enough to include entities other than traditional vertically integrated utilities, such as those that have desegregated their business into generating and transmission/distribution entities. The commenter concludes that the definition of electric utility should include (1) a generating company that is part of a diversified holding company or other corporate structure and (2) an entity that generates and sells electricity at market-based rates, at least so long as the company’s market-based rate authority is governed by tariffs that are subject to the jurisdiction of a rate regulatory agency such as the Federal Energy Regulatory Commission.

*Response:* The commenter's suggestions would undermine the NRC's longstanding basis for not requiring financial qualifications reviews for electric utilities, which is that the recovery of costs is assured. Accordingly, the NRC does not believe that the commentator's suggestions warrant further consideration.

*Comment 24:* One commenter states that if the proposed changes to 10 CFR 50.33 are finalized, then the NRC should adopt and implement procedures to formally and continually monitor the financial qualifications of non-electric utility power reactor licensees.

*Response:* The NRC will consider the commenter's suggestion when the NRC's internal guidance for reviewing licensees' financial information is revised.

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

10 CFR 50.33, Contents of applications; general information.

Section 50.33(f)(2) is amended to state that power reactor applicants for license renewal need not provide financial qualifications information. Nonpower reactor applicants would continue to submit financial qualifications information in their applications. A new sentence is 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.

A new § 50.76 requires that a licensee changing from an electric utility to a non-electric utility entity (i.e., a company that does not obtain revenue from the cost-of-service rate making



process), in a manner other than a license transfer under 10 CFR 50.80, must submit the financial information required by § 50.33(f)(2) for obtaining an operating license. The section also requires that the licensee notify the NRC 75 days before the transition and provide the financial information at that time. The language of the proposed rule was changed slightly to spell out “seventy-five.”

### **Availability of Documents**

The NRC is making the documents identified below available to interested persons through one or more of the following:

**Public Document Room (PDR).** The NRC Public Document Room is located at 11555 Rockville Pike, Public File Area O-1 F21, Rockville, Maryland.

**Rulemaking Web site.** The NRC's interactive rulemaking Web site is located at <http://ruleforum.llnl.gov>. The documents may be viewed and downloaded electronically via this Web site.

**The NRC's Public Electronic Reading Room (PERR).** The NRC's public electronic Reading Room is located at [www.nrc.gov/reading-rm.html](http://www.nrc.gov/reading-rm.html).

**The NRC staff contact (NRC Staff).** Single copies of the final rule, the Regulatory Analysis, and the Environmental Assessment may be obtained from George J. Mencinsky, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Alternatively, you may contact Mr. Mencinsky at (301) 415-3093 or via e-mail to [gjm@nrc.gov](mailto:gjm@nrc.gov).

Document	PDR	Web	PERR	NRC Staff
Regulatory Analysis	x	x	ML032460795	x
Environmental Assessment	x	x	ML032460815	x
Public Comments Received	x		ML032670833	x

### 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 final rule, the NRC eliminates the requirement that applicants for power reactor license renewal provide financial qualifications information and adds a new requirement for submission of financial information on electric utilities holding operating licenses for nuclear power reactors if the applicants cease to be electric utilities in a manner other than a license transfer under 10 CFR 50.80. This final 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 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 rule is

not a major Federal action significantly affecting the quality of the human environment, and, therefore, an environmental impact statement is not required.

This rulemaking will not increase the probability or consequences of accidents. No changes are being made in the types of any effluents that may be released off site, and there is no increase in public radiation exposure. Therefore, there are no radiological impacts associated with the action. The rulemaking does not involve nonradiological plant effluents and has no other environmental impact. Therefore, no nonradiological impacts are associated with the action. Therefore, the NRC determines that there will be no off site impact to the public from this action.

The basis for NRC's finding is set forth in an Environmental Assessment on this final rule. The Environmental Assessment is available as indicated in the section under the Availability of Documents heading. The NRC requested the views of the States on the environmental assessment for the rule and did not receive any comments from the States.

### **Paperwork Reduction Act Statement**

This final 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). The public burden reduction for this information collection is estimated to average 100 hours per request. Power reactor licensees that transition from electric utility to non-electric utility power reactor entities without transferring the license would be required to provide this information under a new § 50.76. 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 final 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. Single copies of the analysis may be obtained from George J. Mencinsky, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, telephone (301) 415-3093, e-mail [gjm@nrc.gov](mailto:gjm@nrc.gov).

### **Regulatory Flexibility Certification**

In accordance with the Regulatory Flexibility Act of 1980, (5 U.S.C. 605(b)), the Commission certifies that this final rule will not have a significant economic impact on a substantial number of small entities. This final rule affects only the licensing and operation of nuclear power plants. The companies that own these plants do not fall within the scope of the definition of "small entities" set forth 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 final rule. The final rule will (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 and, then cease to be electric utilities in a manner other than a license transfer under 10 CFR 50.80. These 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 § 50.109(a)(1).

Accordingly, the final 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 final 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 final rule and is consistent with the intent of the backfit rule.

## **Small Business Regulatory Enforcement Fairness Act**

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.

## 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. 552 and 553, the NRC is adopting 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, 937, 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, 2236, 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 (42 U.S.C. 5841). Section 50.10 also issued under secs. 101, 185, 68 Stat. 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 sec. 204, 88 Stat. 1245 (42 U.S.C. 5844). Sections 50.58, 50.91, and 50.92 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 the financial information that 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 seventy-five (75) days prior to ceasing to be an electric utility in any manner not involving a license transfer under § 50.80, 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 \_\_\_\_\_ 2003.

For the Nuclear Regulatory Commission.

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Annette L. Vietti-Cook,  
Secretary of the Commission.



## **REGULATORY ANALYSIS**

### **FINAL RULE**

#### **FINANCIAL INFORMATION REQUIREMENTS FOR APPLICATIONS TO RENEW OR EXTEND THE TERM OF AN OPERATING LICENSE FOR A POWER REACTOR**

## **1. Introduction**

The U.S. Nuclear Regulatory Commission (NRC) initiated a rulemaking to amend the regulations in 10 CFR Part 50 pertaining to financial qualifications reviews for nuclear power plants. NRC has decided to issue two amendments to the regulations that address financial qualifications reviews for non-electric utility power reactor licensees. The first amendment eliminates the requirement that non-electric utility power reactor licensees submit financial qualifications information when applying for a license renewal. The second amendment adds a new section to Part 50 that creates 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.

### **1.1 Statement of the Problem and Objective of the Rule**

NRC has determined that the existing regulations in 10 CFR Part 50 should be modified to reduce regulatory burden by eliminating unnecessary submission and review of financial qualifications information at the time of renewal of nuclear power reactor operating licenses, 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 new section 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.

The current section 50.33(f) requires non-electric utility power reactor applicants for license renewals to submit financial qualifications information with their applications. NRC has concluded that the submission and 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 the life of 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. NRC monitors and evaluates changes in a licensee's financial health by reviewing the financial and industry trade press and Securities and Exchange Commission (SEC) and Federal Energy Regulatory Commission (FERC) submissions by licensees. If the NRC's evaluation indicates the licensee's financial health has deteriorated, a full financial qualifications review may be initiated. The review of the trade press allows NRC to identify those licensees that are starting to show financial distress through reduced earnings and other indicators. Although the information in the trade press is limited and the information may be for the licensee's parent company, the trade press does

provide the early warning that NRC needs to initiate a full financial qualifications review. This early warning is provided because the NRC is concerned with a licensee's ability to have access to funds to operate their nuclear facility safely and is not concerned with a licensee's ability to make a profit. Since most other stakeholders are concerned about a licensee's ability to make a profit, this is what the trade press reports, which allows enough early warning so that NRC can initiate a full financial qualifications review and take any necessary actions.

The NRC believes that license renewal is not accompanied by a change in a licensee's financial condition, because license renewal does not warrant a financial qualifications review. In addition, the NRC cannot require a licensee to change its business practices to be more profitable; however, it can require licensees to meet the regulatory and license requirements or face the possibility of being shut down for safety reasons. The NRC spends considerable resources evaluating the safety and technical aspects of renewal applicants. On average NRC spends approximately 19,000 staff hours on each license renewal application.

Thus, by amending section 50.33(f) 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 with respect to financial qualifications reviews at license renewal.

New section 50.76 establishes 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 by a state public utility commission (PUC) or the 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. NRC believes that the transition from an electric utility to a non-electric utility is a significant event that requires regulatory review to ensure the continued safe operation under the license. Although no problems have occurred to date with transitions to non-electric utility status, NRC hopes to prevent any problems from occurring by taking this action.

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 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. Table 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.

**Table 1-1: Power Reactor Financial Qualification Submission Requirements**

Event	Requirements for Electric Utilities	Requirements for Non-Electric Utility Entities
<b>Initial License to Operate</b>	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.
<b>License Transfer</b>	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.
<b>Transition from an Electric Utility to a Non-Electric Utility</b>	Not applicable	New 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.
<b>Evidence of a Decline in Licensee Financial Status</b>	Financial qualifications information is submitted upon request of NRC.	Financial qualifications information is submitted upon request of NRC.

**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 summarize the financial qualifications information submission requirements of these three sections of 10 CFR 50 and the financial qualifications review process itself.

*Section 50.33(f)(2) - Initial Operating License Applications.* Section 50.33(f)(2) requires non-electric 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 allows NRC to assess the availability of funds the licensee has to manage licensed activities in a manner that is protective of 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.

*Financial Qualifications Review Process.* The NRC staff performs a review of the estimated total annual operating costs for the first five years of operation following the issuance of an initial license or a license transfer and the sources of funds to cover these operating costs. The review includes the applicant's projections of the market price of electric power in the market area of the plant, any Government-required charges for nuclear plant operations (e.g., non-bypassable wire charges), any long-term contracts the applicant has for the plant (such as a power purchase agreement), contracts or other arrangements with relevant transmission or grid reliability authorities that designate the plant as a "must-run" facility, and any other information relevant to the sources of revenues. The staff also reviews the adequacy of the applicant's plans to provide decommissioning funding and makes a finding on both the adequacy of the amount of the applicant's proposed funding and the mechanism or mechanisms proposed for providing funding assurance. In addition, the staff also reviews areas relating to insurance and foreign ownership, including the adequacy of negation plans should there be foreign ownership concerns.

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

The following discussion describes the regulatory options that were considered for each of the two amendments, with analysis presented in Section 3.

### **2.1 Option 1 - No Action**

#### **2.1.1 No 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.

#### **2.1.2 No New Section 10 CFR 50.76**

Under Option 1, the no-action alternative, NRC would not create a new 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 - Final 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, because the NRC is able to obtain financial qualifications information through other means when 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 selected over Option 1 because it provides regulatory relief for non-electric utility power reactor licensees and reduces NRC's costs.

### **2.2.2 New Section 10 CFR 50.76**

Under Option 2, NRC would establish a new requirement 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 selected 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 action. 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 effect. 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>1</sup> Each attribute listed in Chapter 5 of the handbook was evaluated for applicability to this action. The following attributes are expected to have material costs or benefits due to the regulatory action:

- *Industry Implementation* -- Power reactor licensees incur a cost to read and familiarize themselves with the final rule.

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<sup>1</sup> "Regulatory Analysis Technical Evaluation Handbook, Final Report," NUREG/BR-0184, Office of Nuclear Regulatory Research, January 1997.

- *Industry Operation* -- The final action amending section 50.33(f) results in a savings to non-electric utility power reactor licensees who apply for power reactor license renewals. The final action to create a new section 50.76, results in a new cost for licensees executing electric utility to non-electric utility transitions not involving an operating license transfer. Under section 50.76 licensees are required to submit the financial qualifications information that is required in section 50.33(f).
- *NRC Operation* -- The final action to amend section 50.33(f) results in a savings to NRC, since a review of financial qualifications information would no longer be required. NRC incurs costs associated with new 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 amendment to section 50.33(f) reduces unnecessary burden on regulated entities. The amendment to section 50.76 provides for greater regulatory clarity. The benefits accruing to this attribute are evaluated qualitatively.

Attributes that are *not* expected to have material costs or benefits 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 final rule would not adversely affect safeguards against radiation exposure to humans and property (i.e., public health and safety) because licensees still would be required to operate their reactors safely. Safe operation is confirmed through regular inspections of each licensee by on-site inspectors. The NRC maintains inspectors at plant sites to ensure safe operations and ensure compliance with the Commission's rules and operating licenses. The inspector, whose primary role is to ensure safe operations, would be able to identify any significant safety concerns that resulted from funding shortfalls, and the NRC has the authority to shut down a plant that is not being operated safely. In addition, the NRC reviews the financial and industry trade press to identify licensees that may require a full financial review to ensure the protection of public health and safety. Thus, for license renewal, the NRC believes that there is not a significant cost or benefit to public health and safety of not reviewing the financial qualifications of non-electric utility license renewal applicants.

No changes in the types or quantities of effluents that may be released offsite would result from this action, 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 changes are administrative in nature.

### 3.2 Analytical Methodology

This section describes the process used to evaluate values and impacts associated with the final 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>2</sup>

The remaining three attributes (industry implementation, industry operation, and NRC operation) are evaluated quantitatively. Quantitative analysis requires a baseline characterization of the universe, 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 final rule. The *values* are considered to be savings related to (1) non-electric utility licensees applying for license renewal no longer being required 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). Although the action would result in enhanced regulatory efficiency, these benefits were not quantified.

The *impacts* of the 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.

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:

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<sup>2</sup> The regulatory efficiency attribute is evaluated qualitatively by definition. See NRC's *Regulatory Analysis Technical Evaluation Handbook*, Section 5.5.14.

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

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 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>3</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***

1. *Power reactors are located at 65 sites containing 103 operating commercial power reactors.*<sup>4</sup>
2. *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.*
3. *Eleven power reactor operating licensees, who own 32 power reactors, have already applied for or have announced they will apply for renewal before October 2003. These reactors are not included in the analysis. Sixteen power reactors at eight sites have already received a renewed operating license: Arkansas Nuclear One 1, Calvert Cliffs 1 and 2, Edwin I. Hatch 1 and 2, North Anna 1 and 2, Oconee 1, 2, and 3, Peach Bottom 2 and 3, Surry 1 and 2, and Turkey Point 3 and 4. NRC is currently reviewing the renewal applications for 14 reactors at nine sites: Catawba 1 and 2, Dresden 2 and 3, Fort Calhoun, Ginna, McGuire 1 and 2, Quad Cities 1 and 2, H.B. Robinson 2, St. Lucie 1 and 2, and Summer 1. One operating licensee has announced its intention to file for license renewal prior to October 2003, for the Farley 1 and 2 reactors.*
4. *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 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 a maximum of 66 applications for license renewal. Because 18 sites have already applied for license renewal or plan to apply for license renewal prior to October 2003, the analysis includes only the remaining 48 potential license renewals during the time period of the analysis (i.e., October 2003 through 2035,*

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<sup>3</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 regarding pre-decisional activities.

<sup>4</sup> Information regarding the number of reactors and their license expiration dates was obtained from NUREG-1350, “NRC Information Digest, 2002 Edition.”

which is the latest initial license expiration date for an operating power reactor license).

5. *The licensees for all operating power reactors are assumed to renew the initial operating license of each reactor.*<sup>5</sup>
6. *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 action being underestimated because the savings from the second license renewal applications from non-electric utility power reactor licensees are not included.
7. *Unless available information indicates otherwise, licensees file for operating license renewals 14 years before their initial license expires or in October 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 60 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.") This assumption may result in the reported savings of the final rule to be overstated because 15 power reactors have current operating licenses that expire in less than 14 years and thus have modeled renewal dates that default to 2003.
8. *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 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 (i.e., 20% of 48 potential renewal applications ≈

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<sup>5</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..."

- 9). See assumption number four for discussion and derivation of the 48 potential renewal applications.
9. *Power reactor licensees require 100 hours to prepare the financial qualifications information.*<sup>6</sup> The lower and upper bounds for this parameter are assumed to be 50 hours and 200 hours, respectively.
  10. *The assumed average labor rate for licensee staff is \$80.00 per hour.*<sup>7</sup>
  11. *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.
  12. *Power reactor licensees require two hours each to review and familiarize themselves with the amended regulations.*
  13. *Table 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 NRC web site and NRC Nuclear Reactor Regulation staff for 60 power reactors. These 60 power reactors are identified with their license renewal dates in bold. The 43 modeled renewal dates are the anticipated dates for renewal. The actual date of renewal for each of these 43 sites may be different by five or more years. Reactors that already have approved renewal applications have their renewed license expiration date in bold.

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<sup>6</sup> The hours estimate is based in 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>7</sup> The labor rate is based on the Nuclear Reactor Regulation (NRR) NRC staff average hourly rate as described in NUREG/BR-0184.

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

Licensee	Reactor name	Initial or Renewed License Expiration Date	Actual or Modeled Application Filing Date <sup>a</sup>
AmerGen Energy Company, LLC	Clinton 1	Sep-29-2026	Sep-2012
	Oyster Creek	Dec-15-2009	Oct-2003
	Three Mile Island 1	Apr-19-2014	Oct-2003
Arizona Public Service Co.	Palo Verde 1	Dec-31-2024	Dec-2010
	Palo Verde 2	Dec-09-2025	
	Palo Verde 3	Mar-25-2027	
Calvert Cliffs Nuclear Power Plant, Inc.	Calvert Cliffs 1	<b>Jul-31-2034</b>	<b>Apr-1998</b>
	Calvert Cliffs 2	<b>Aug-31-2036</b>	
Carolina Power & Light Co.	Brunswick 1	Sep-08-2016	<b>Dec-2004</b>
	Brunswick 2	Dec-27-2014	
	H.B. Robinson 2	Jul-31-2010	<b>Jun-2002</b>
	Shearon Harris 1	Oct-24-2026	<b>Oct-2006</b>
Detroit Edison Co.	Fermi 2	Mar-20-2025	Mar-2011
Dominion Nuclear Connecticut, Inc.	Millstone 2	Jul-31-2015	<b>Jan-2004</b>
	Millstone 3	Nov-25-2025	
Duke Energy Corp.	Catawba 1	Dec-06-2024	<b>Jun-2001</b>
	Catawba 2	Feb-24-2026	
	McGuire 1	Jun-12-2021	<b>Jun-2001</b>
	McGuire 2	Mar-03-2023	
	Oconee 1	<b>Feb-06-2033</b>	<b>Jul-1998</b>
	Oconee 2	<b>Oct-06-2033</b>	
	Oconee 3	<b>Jul-19-2034</b>	
Duquesne Light Co.	Beaver Valley 1	Jan-29-2016	<b>Sep-2004</b>
	Beaver Valley 2	May-27-2027	
Energy Northwest	Columbia Generating Station	Dec-20-2023	<b>2008</b>
Entergy Nuclear Operations, Inc.	Indian Point 2	Sep-28-2013	Oct-2003
	Indian Point 3	Dec-15-2015	
	James A. FitzPatrick	Oct-17-2014	Oct-2003
	Pilgrim 1	Jun-08-2012	<b>Dec-2004</b>
	Vermont Yankee	Mar-21-2012	Oct-2003
Entergy Operations, Inc.	Arkansas Nuclear 1	<b>May-20-2034</b>	<b>Feb-2000</b>
	Arkansas Nuclear 2	Jul-17-2018	<b>Oct-2003</b>
	Grand Gulf 1	Jun-16-2024	Jun-2010
	River Bend 1	Aug-29-2025	Aug-2011
	Waterford 3	Dec-18-2024	Dec-2010

Licensee	Reactor name	Initial or Renewed License Expiration Date	Actual or Modeled Application Filing Date <sup>a</sup>
Exelon Energy Co.	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-10-2009	<b>Jan-2003</b>
	Dresden 3	Jan-12-2011	
	LaSalle County 1	May-17-2022	May-2008
	LaSalle County 2	Dec-16-2023	
	Limerick 1	Oct-26-2024	Oct-2010
	Limerick 2	Jun-22-2029	
	Peach Bottom 2	<b>Aug-08-2033</b>	<b>Jul-2001</b>
	Peach Bottom 3	<b>Jul-02-2034</b>	
	Quad Cities 1	Dec-14-2012	<b>Jan-2003</b>
	Quad Cities 2	Dec-14-2012	
FirstEnergy Nuclear Operating Company	Davis-Besse	Apr-22-2017	<b>Dec-2004</b>
	Perry 1	Mar-18-2026	Mar-2012
Florida Power Corp.	Crystal River 3	Dec-03-2016	<b>Jan-2009</b>
Florida Power & Light Co.	St. Lucie 1	Mar-01-2016	<b>Nov-2001</b>
	St. Lucie 2	Apr-06-2023	
	Turkey Point 3	<b>Jul-19-2032</b>	<b>Sep-2000</b>
	Turkey Point 4	<b>Apr-10-2033</b>	
FPL Energy Seabrook	Seabrook 1	Oct-17-2026	Oct-2012
Indiana Michigan Power Co.	D.C. Cook 1	Oct-25-2014	<b>Nov-2003</b>
	D.C. Cook 2	Dec-23-2017	
Nebraska Public Power District	Cooper 1	Jan-18-2014	Oct-2003
Nine Mile Point Nuclear Station, LLC	Nine Mile Point 1	Aug-22-2009	<b>May-2004</b>
	Nine Mile Point 2	Oct-31-2026	
Nuclear Management Co.	Monticello	Sep-08-2010	Oct-2003
	Prairie Island 1	Aug-09-2013	Oct-2003
	Prairie Island 2	Oct-29-2014	
Nuclear Management Co., LLC	Duane Arnold	Feb-21-2014	Oct-2003
	Palisades	Mar-14-2011	Oct-2003
	Point Beach 1	Oct-05-2010	Oct-2003
	Point Beach 2	Mar-08-2013	
Nuclear Management Corp.	Kewaunee	Dec-21-2013	Oct-2003
Omaha Public Power District	Fort Calhoun	Aug-09-2013	<b>Jan-2002</b>
Pacific Gas & Electric Co.	Diablo Canyon 1	Sep-22-2021	Sep-2007
	Diablo Canyon 2	Apr-26-2025	

Licensee	Reactor name	Initial or Renewed License Expiration Date	Actual or Modeled Application Filing Date <sup>a</sup>
PSEG Nuclear, LLC	Hope Creek 1	Apr-11-2026	<b>2007</b>
	Salem 1	Aug-13-2016	<b>2007</b>
	Salem 2	Apr-18-2020	
PPL Susquehanna, LLC	Susquehanna 1	Jul-17-2022	<b>Jul-2006</b>
	Susquehanna 2	Mar-23-2024	
Rochester Gas & Electric Corp.	GINNA	Sep-18-2009	<b>Aug-2002</b>
South Carolina Electric & Gas Co.	Summer 1	Aug-06-2022	<b>Aug-2002</b>
South Nuclear Operating Co.	Joseph M. Farley 1	Jun-25-2017	<b>Sep-2003</b>
	Joseph M. Farley 2	Mar-31-2021	
Southern California Edison Company	San Onofre 2	Oct-18-2022	Oct-2008
	San Onofre 3	Oct-18-2022	
Southern Nuclear Operating Co., Inc.	Edwin I. Hatch 1	<b>Aug-06-2034</b>	<b>Mar-2000</b>
	Edwin I. Hatch 2	<b>Jun-13-2038</b>	
	Vogtle 1	Jan-16-2027	<b>Jun-2007</b>
	Vogtle 2	Feb-09-2029	
STP Nuclear Operating Co.	South Texas Project 1	Aug-20-2027	Aug-2013
	South Texas Project 2	Dec-15-2028	
Tennessee Valley Authority	Browns Ferry 2	Jun-28-2014	<b>Dec-2003</b>
	Browns Ferry 3	Jul-02-2016	
	Sequoyah 1	Sep-17-2020	<b>Dec-2007</b>
	Sequoyah 2	Sep-15-2021	
	Watts Bar 1	Nov-09-2035	Nov-2021
TXU Electric Company	Comanche Peak 1	Feb-08-2030	Feb-2016
	Comanche Peak 2	Feb-02-2033	
Union Electric Co.	Callaway 1	Oct-18-2024	Oct-2010
Virginia Electric & Power Co.	North Anna 1	<b>Apr-01-2038</b>	<b>May-2001</b>
	North Anna 2	<b>Aug-21-2040</b>	
	Surry 1	<b>May-25-2032</b>	<b>May-2001</b>
	Surry 2	<b>Jan-29-2033</b>	
Wolf Creek Nuclear Operating Corp.	Wolf Creek 1	Mar-11-2025	<b>Sep-2006</b>

Source: NRC, Information Digest, 2002 Edition, NUREG-1350, Vol.14. (Source of data in table except where noted.)

<sup>a</sup> Sources for actual renewal dates are NRC's website at [www.nrc.gov/reactors/operating/licensing/renewal/applications.html](http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html) and NRC NRR staff.

## **NRC**

4. *NRC requires 200 hours to review one licensee's financial qualifications information.*<sup>8</sup> NRC takes longer to review the financial qualifications information than the licensee take to prepare and submit the information for two reasons. First, much of the information the licensee submits has been prepared for other purposes and thus requires relatively less time to prepare and submit to NRC. Secondly, the NRC spends considerable time verifying and analyzing the submitted information, and then reporting the results of the analysis in the Safety Evaluation Report. As part of the analysis, NRC typically also conducts sensitivity analysis to evaluate the robustness of its conclusions. The lower and upper bounds for this parameter are assumed to be 150 hours and 250 hours, respectively.
5. *The average labor rate for NRC staff is estimated to be \$86.00 per hour.*<sup>9</sup>

## **Miscellaneous**

6. *The analysis includes all license renewal applications expected to be received after October 1, 2003.* Therefore, the analysis discounts all future costs and savings back to 2003, using a 3 percent discount rate. All dollar amounts in the analysis are stated in 2003 dollars.
7. *The analysis uses a time horizon of 2053 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 2053, due to discounting the costs back to 2003, costs incurred after 2053 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 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.

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<sup>8</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>9</sup> The labor rate is based on the NRR/NRC staff average hourly rate.

### 3.3.2 Option 2 - Final Action

#### *Industry Implementation*

**Impact:** Read the amended regulations.

- (2 hours per site) x (\$80.00 per hour) x (65 reactor sites) = \$10,400

This amount is assumed to be incurred in 2003 and thus the amount is not discounted.

#### *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. Table 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 Table 3-2 are due to the timing of the renewal application submission in relation to the initial license expiration date (i.e., 10 years, 14 years, and 20 years, respectively) and the assumed percent of all renewal applications that are from non-electric utility licensees (i.e., 10 percent, 20 percent, and 30 percent, respectively).

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 2003.<sup>10</sup> These discounted amounts are added across all nine applicants to yield a total savings of \$65,700. Table 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 \$10,800 and \$214,900, respectively. As shown in Table 3-2, in the lower bound estimate there are three non-electric utility renewal applications and in the upper bound there are 14 non-electric utility renewal applications. The lower and upper bound estimates represent the combined lower and upper bound values for the two parameters mentioned in the paragraph above and the licensee burden to prepare and submit the financial qualifications information. For example, in the lower bound estimate, the time assumed for licensees to prepare and submit financial qualification information is 50 hours, so the savings is \$4,000 per applicant (i.e., (50 hours per applicant) x (\$80.00 per hour)). The \$4,000 is then discounted back to 2003 for each of the three applicants shown in Table 3-2.

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<sup>10</sup> The individual amounts are discounted back to 2003 using the following formula: Discounted Savings = Savings x (1/(1+r)<sup>t</sup>). Where "Savings" is the undiscounted amount, "r" is the discount rate of three percent, and "t" is the difference in time between when the application was submitted and the year 2003.



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

Year	Number of Applications					
	Lower Bound		Best Estimate		Upper Bound	
	All Applications	Non-Electric Utility Applications	All Applications	Non-Electric Utility Applications	All Applications	Non-Electric Utility Applications
2003	11	1	15	3	18	5
2004	10	1	6	1	12	4
2005	0	0	0	0	2	1
2006	3	0	3	1	7	2
2007	4	0	5	1	5	2
2008	1	0	3	1	1	0
2009	1	0	1	0	1	0
2010	0	0	6	1	1	0
2011	1	0	2	0	0	0
2012	2	0	4	1	0	0
2013	0	0	1	0	0	0
2014	6	1	0	0	0	0
2015	2	0	0	0	1	0
2016	4	1	1	0	0	0
2017	1	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
<b>Total</b>	<b>48</b>	<b>3</b>	<b>48</b>	<b>9</b>	<b>48</b>	<b>14</b>

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.

**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, the \$8,000 amount is then discounted back from the date of the transition to 2003. These discounted amounts are added across all five transitions to yield a total incurred cost of \$24,100. Table 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 \$7,400 and \$89,900, 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 number of transitions and the licensee burden to prepare and submit the financial qualifications information. For example, in the lower bound estimate, the time assumed for licensees to prepare and submit financial qualification information is 50 hours, so the cost is \$4,000 per applicant (i.e., (50 hours per applicant) x (\$80.00 per hour)). The \$4,000 is then discounted back to 2003 for applications submitted in 2003, 2023, and 2043.

**Table 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	NRC Savings	Discounted NRC Savings
2003	3	\$ 24,000	\$ 24,000	\$ 51,600	\$ 51,600
2004	1	\$ 8,000	\$ 7,800	\$ 17,200	\$ 16,700
2005	0	\$ 0	\$ 0	\$ 0	\$ 0
2006	1	\$ 8,000	\$ 7,300	\$ 17,200	\$ 15,700
2007	1	\$ 8,000	\$ 7,100	\$ 17,200	\$ 15,300
2008	1	\$ 8,000	\$ 6,900	\$ 17,200	\$ 14,800
2009	0	\$ 0	\$ 0	\$ 0	\$ 0
2010	1	\$ 8,000	\$ 6,500	\$ 17,200	\$ 14,000
2011	0	\$ 0	\$ 0	\$ 0	\$ 0
2012	1	\$ 8,000	\$ 6,100	\$ 17,200	\$ 13,200
<b>Total</b>	<b>9</b>	<b>\$ 72,000</b>	<b>\$ 65,700</b>	<b>\$ 154,800</b>	<b>\$ 141,300</b>

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.

The savings are discounted at a rate of three percent.

**Table 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	\$ 17,200	\$ 17,200
2013	1	\$ 8,000	\$ 6,000	\$ 17,200	\$ 12,800
2023	1	\$ 8,000	\$ 4,400	\$ 17,200	\$ 9,500
2033	1	\$ 8,000	\$ 3,300	\$ 17,200	\$ 7,100
2043	1	\$ 8,000	\$ 2,400	\$ 17,200	\$ 5,300
<b>Total</b>	<b>5</b>	<b>\$ 40,000</b>	<b>\$ 24,100</b>	<b>\$ 80,000</b>	<b>\$ 51,900</b>

Note: Only the years where a transition is modeled in the analysis are included in the table.

Numbers are rounded to the nearest 100.

The savings are discounted at a rate of three 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.

- $(200 \text{ hours per applicant}) \times (\$86.00 \text{ per hour}) = \$17,200 \text{ per applicant}$

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. Table 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 Table 3-2 are due to the timing of the renewal application submission in relation to the initial license expiration date (i.e., 10 years, 14 years, and 20 years, respectively) and the assumed percent of all renewal applications that are from non-electric utility licensees (i.e., 10 percent, 20 percent, and 30 percent, respectively).

For each of the nine non-electric utility applicants in the analysis, the \$17,200 amount is then discounted back from the date of the application to 2003. These discounted amounts are added across all nine applicants to yield a total savings of \$141,300. Table 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 the total discounted amounts are estimated to be \$34,700 and \$288,800, respectively. In the lower bound estimate there are three non-electric utility renewal applications and in the upper bound there are 14 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, thus yielding larger savings on a discounted dollar basis. The lower and upper bound estimates represent the combined lower and upper bound values for the two parameters mentioned in the paragraph above and the NRC burden to review the financial qualifications information. For example, in the lower bound estimate, the time assumed for NRC to review the financial qualification information is 150 hours, so the savings is \$12,900 per applicant (i.e.,  $(150 \text{ hours per applicant}) \times (\$86.00 \text{ per hour})$ ). The \$12,900 is then discounted back to 2003 for each of the three applicants shown in Table 3-2.

**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.

- $(200 \text{ hours per transition}) \times (\$86.00 \text{ per hour}) = \$17,200 \text{ per transition}$

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, the \$17,200 amount is discounted back from the date of the transition to 2003. These discounted amounts are added across all five transitions to yield a total incurred cost of \$51,900. Table 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 \$24,000 and \$120,800, 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 number of transitions and the

NRC burden to review the financial qualifications information. For example, in the lower bound estimate, the time assumed for NRC to review the financial qualification information is 150 hours, so the cost is \$12,900 per applicant (i.e., (150 hours per applicant) x (\$86.00 per hour)). The \$12,900 is then discounted back to 2003 for applications submitted in 2003, 2023, and 2043.

***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 Tables 4-1 and 4-2 by the CFR sections that would be changed by the action. Because the industry implementation attribute is affected by amendments to both sections this attribute is included only in the combined summary table, Table 4-3. Tables 4-1 and 4-2 show that the benefits are due to the changes in section 50.33(f) and the costs are due to the changes in section 50.76. The total net benefit of the action is summarized in Table 4-3. As these tables 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>11</sup> Table 4-4 summarizes the qualitative results of the analysis.

**Table 4-1: Quantitative Results for Amendments to Section 50.33(f) (Present Value)**

<b>Attribute</b>	<b>Option 1:No Action</b>	<b>Option 2: Final Action</b>
<b><i>Industry Operation</i></b>		
Values	\$0	\$65,700
Impacts	\$0	\$0
<b><i>NRC Operation</i></b>		
Values	\$0	\$141,300
Impacts	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$207,100</b>

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<sup>11</sup> See Section 3.2 for a discussion of the reasons that quantitative analysis is not feasible for some of the affected attributes.

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

<b>Attribute</b>	<b>Option 1: No Action</b>	<b>Option 2: Final Action</b>
<b><i>Industry Operation</i></b>		
Values	\$0	\$0
Impacts	\$0	(\$24,100)
<b><i>NRC Operation</i></b>		
Values	\$0	\$0
Impacts	\$0	(\$51,900)
<b>Total</b>	<b>\$0</b>	<b>(\$76,000)</b>

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

<b>Attribute</b>	<b>Option 1: No Action</b>	<b>Option 2: Final Action</b>
<b><i>Industry Operation</i></b>		
Values	\$0	\$65,700
Impacts	\$0	(\$24,100)
<b><i>NRC Operation</i></b>		
Values	\$0	\$141,300
Impacts	\$0	(\$51,900)
<b><i>Industry Implementation</i></b>		
Values	\$0	\$0
Impacts	\$0	(\$10,400)
<b>Total</b>	<b>\$0</b>	<b>\$120,600</b>

**Table 4-4: Qualitative Results**

<b>Regulatory Options</b>	<b>Qualitative Values/Impacts</b>
<b>Option 1: No Action</b>	<p><b>Values:</b> None</p> <p><b>Impacts:</b> None</p>
<b>Option 2: Final Action</b>	<p><b>Values:</b> <i>Regulatory Efficiency</i> - Increase in regulatory certainty, consistency, and clarity. Increase in the consistency of treatment of licensees.</p> <p><b>Impacts:</b> None</p>

Option 2, the final rule, results 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 \$65,700 in preparation costs and to save NRC \$141,300 in review costs.

The final rule 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 \$24,100 in preparation costs and to cost the NRC \$51,900 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 the final rule is estimated to be \$120,600. The lower and upper bounds on the net benefit are estimated to be savings of \$3,700 and \$282,700, respectively. The lower and upper bound estimates include the combined lower or upper bound values for each of the parameters varied in the analysis. Table 4-5 summarizes the five parameters' lower and upper bound values used in the analysis. Table 4-6 summarizes the combined lower and upper bound sensitivity analysis results for each of the amendments.

**Table 4-5: Parameter Values**

<b>Parameter</b>	<b>Lower Bound</b>	<b>Best Estimate</b>	<b>Upper Bound</b>
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

**Table 4-6: Sensitivity Analysis Results for All Amendments (Present Value)**

<b>Attribute</b>	<b>Lower Bound</b>	<b>Upper Bound</b>
<b><i>Industry Operation</i></b>		
Values	\$10,800	\$214,900
Impacts	(\$7,400)	(\$89,900)
<b><i>NRC Operation</i></b>		
Values	\$34,700	\$288,800
Impacts	(\$24,000)	(\$120,800)
<b><i>Industry Implementation</i></b>		
Values	\$0	\$0
Impacts	(\$10,400)	(\$10,400)
<b>Total</b>	<b>\$3,700</b>	<b>\$282,700</b>

## **5. Backfit Analysis**

In accordance with 10 CFR 50.109, NRC has determined that the final rule does not constitute a backfit because the amendment to section 50.33(f) and the new section 50.76 set forth information and reporting requirements, which do not constitute regulatory actions to which the backfit rule applies. In addition, the rulemaking voluntarily relaxes the current requirement for submission of financial qualifications information by non-electric utilities seeking renewal of power reactor operating licenses. Such voluntary relaxations do not impose a requirement which is an essential element of “backfitting” as defined in section 50.109(a)(1). Therefore, a backfit analysis is not required.

## **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. The final rule removes 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 the final rule yields net benefits to licensees and NRC without additional risk to the public.
- 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. The final rule establishes a new 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 the final rule may yield a net cost to licensees and NRC. Although the analysis included five 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 new requirement established by the final rule completes 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. Table 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 requirements under the final rule results 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 staff recommended rulemaking alternative Option 2.

## **7. Implementation**

The final rule will become effective 30 days after publication in the *Federal Register*.



## **ENVIRONMENTAL ASSESSMENT**

### **FINAL RULE**

#### **FINANCIAL INFORMATION REQUIREMENTS FOR APPLICATIONS TO RENEW OR EXTEND THE TERM OF AN OPERATING LICENSE FOR A POWER REACTOR**

##### **Introduction**

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 10 CFR 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 final 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 final 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 final rule, and documents its finding of no significant impact.

##### **Identification of the Action**

The final action amends section 50.33(f)(2) and creates a new section, 50.76. The amendment to section 50.33(f)(2) removes 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) reduces 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 requires 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 provides 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 Part 50 does not set forth any requirement with respect to financial qualification reviews for such transitions.

## **Need for the Action**

The final rule 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 final rule advances 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 submission of such financial information and a concomitant financial review of non-electric utility power reactor applicants at 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 establishes 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, the NRC believes that establishing a formal review requirement would enhance public confidence while maintaining regulatory efficiency and effectiveness.

## **Environmental Impacts of Action**

The final rule 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 removes the need for non-electric utilities to submit financial qualifications information with renewal applications for power reactor operating licenses. The action, therefore, places non-electric utility power reactor licensees on the same footing as electric utility power reactor licensees with respect to the license renewal process. 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).

The rule changes are primarily administrative in nature since they concern the submission of information on financial qualifications. There are no radiological environmental impacts associated with the action and it does not involve non-radiological plant effluents. For these reasons, the NRC expects no significant environmental impact to result from this final rule.

### **Alternatives to the Proposed Action**

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

### **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.

### **Agencies and Persons Consulted**

The NRC developed the rule and this environmental assessment. The NRC sent this environmental assessment to all State liaison officers for comment.

### **Finding of No Significant Impact**

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