

RULEMAKING ISSUE AFFIRMATION

May 15, 2002

SECY-02-0084

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: FINAL RULE ON DECOMMISSIONING TRUST PROVISIONS

PURPOSE:

To request Commission approval to publish in the *Federal Register* a final rule on decommissioning trust provisions.

BACKGROUND:

The staff submitted "Proposed Rule on Decommissioning Trust Provisions," (SECY-01-0049) to the Commission on March 23, 2001. The Commission issued a staff requirements memorandum (SRM) on April 20, 2001, approving publication of the proposed rule. The proposed rule was published in the *Federal Register* on May 30, 2001 (66 FR 29244). The staff issued simultaneously DG-1106, "Proposed Revision 1 of Regulatory Guide 1.159, Assuring the Availability of Funds for Decommissioning Nuclear Reactors." The attached final rule has been revised in response to the comments received on the proposed rule. It contains the final amendments and will be published in the *Federal Register*. Also attached is Regulatory Guide 1.159, Revision 1, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors." The revision reflects comments received on the draft regulatory guide.

DISCUSSION:

The proposed rule was written to establish objectives and criteria considered essential by the Commission for decommissioning trust fund agreements. The proposed rule applied to all

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power reactor licensees, not just to licensees that are transferring their licenses or have undergone or are undergoing rate deregulation.

A total of 36 letters were received from 34 commenters. The letters contained approximately 280 comments on the proposed rule and draft regulatory guide. Seventeen of the commenters were licensees, 11 were representatives of utility groups (some of whose members are licensees), 3 were State agencies or commissions, 1 was the National Association of Regulatory Utility Commissioners (NARUC), and 2 were investment management companies.

About half of the comments were unique. The comments were fairly equally divided between the proposed rule and the draft regulatory guide.

Several of the commenters supported the NRC's goal of maintaining regulatory oversight of nuclear decommissioning trust funds, where necessary, and agreed that the NRC may need to be more active in its oversight of decommissioning trust agreements. Two other commenters commended the NRC for undertaking this rulemaking and fully supported the NRC's efforts to ensure that a utility industry made more efficient through competition remains a safe and reliable industry. Another commenter agreed with the NRC's concern that the decommissioning trust corpus be safeguarded from investment risks. The Nuclear Energy Institute (NEI) said that "Upon taking into account the comments and suggestions for improvement . . . , NRC's proposed rulemaking and proposed guidance likely will enhance the assurance for decommissioning funding already provided by the industry and should improve public confidence that all nuclear power reactors will be properly decommissioned." Ten commenters endorsed NEI's comments and one also endorsed the comments submitted by Winston & Strawn on behalf of the Utility Decommissioning Group and the Tennessee Valley Authority. One licensee stated that NRC should withdraw the notice of proposed rulemaking because existing regulations from NRC, the Internal Revenue Service, and the State regulatory agencies are more than adequate to protect the public health and safety. In this licensee's view, the proposed rulemaking is duplicative of existing requirements, would add unnecessary regulatory burden without a corresponding safety benefit, and is inconsistent with NRC's regulatory burden reduction initiative. Another commenter expressed similar views and stated that the proposed rule may eliminate some of the flexibility of the existing rule. Yet another commenter opposing the rule said if the NRC intends to continue to impose decommissioning funding conditions in individual licenses, there is no need for the rule.

Most of the comments fit under the categories of applicability of the rule, notifications and disbursements, and restrictions on funds. The restrictions-on-funds category has eight subcategories: "investment grade," investment in nuclear power reactor licensees, fund management, credit for decommissioning trust earnings, modifications to trusts, foreign trustees, nonradiological decommissioning funds, and implementation of the rule.

An often repeated comment was that the proposed rules would apply to all licensees, even if they are under Federal Energy Regulatory Commission (FERC) or State regulation. The NRC

staff has reconsidered its earlier proposal and now agrees that the proposed rule may be burdensome for licensees who are still regulated, because NRC regulations would not significantly improve the public health and safety. As a result, the final rule will only apply to licensees that are no longer regulated by State Public Utility Commissions (PUCs) or FERC. However, all power reactor licensees, both rate regulated and otherwise, will be required to notify the NRC in advance of decommissioning trust withdrawals if these withdrawals are made before permanent cessation of operations.

The section of the proposed rule on notifying the NRC of disbursements from a trust brought the most comments (14). The commenters expressed concern that the NRC would impose requirements on licensees who are decommissioning under 10 CFR 50.82. This issue was resolved by explicitly stating in the rule that the rule does not apply to licensees whose plants are in decommissioning pursuant to 10 CFR 50.82. In a related matter several commenters wanted clarification on the use of the phrases “ordinary expenses” and “ordinary administrative expenses” as they relate to notification requirements. This was resolved by using the definition of such expenses in the Internal Revenue Service Code.

As mentioned above, various comments pertained to restrictions on funds. These comments were grouped into the eight subcategories identified above. The issue receiving the greatest number of comments under the fund restriction category is the proposed rule’s use of the term “investment grade.” Twelve commenters stated that NRC’s use of the term is problematic as it is not common or well-defined and that the commonly used “prudent investor standard” should be used in its place. Further, FERC already uses the “prudent investor standard” and defines it. For these reasons, the final rule uses “prudent investor standard” instead of the term “investment grade.”

Eight commenters stated that the final rule should clarify a “material” modification to a trust. A material modification requires a 30-day prior notification to the NRC. Examples of actions considered material and immaterial by NRC are provided in the statement of considerations for the final rule and the final revised regulatory guide.

Finally, 11 commenters called for transition plans from the existing provisions to the new requirements. Commenters stated that, because a small number of trustees act for a large number of licensees and their trusts, the normal implementation period should be extended to allow sufficient time to review and conform trust documents as necessary to comply with the rule. The rule now calls for an implementation period of 1 year from the date of publication of the final rule.

In response to a comment, the staff has revised §72.30(c)(5) in the final rule to make it consistent with §50.75(e) and (h). The NRC has also updated Regulatory Guide 1.159 to include sample trust fund language containing these terms and conditions.

RESOURCES:

After the rule is implemented, it is estimated to require between 60 to 80 NRC staff-hours within the following year. There should be no additional NRC staff costs.

COORDINATION:

The Office of the General Counsel has no legal objection to this paper. The Office of the Chief Financial Officer has no objection to the resource estimates contained in this paper. The Chief Information Officer concurs that there will be no information technology impacts. The Advisory Committee on Reactor Safeguards decided not to review the rule and has no objection to publishing it in the *Federal Register*.

RECOMMENDATIONS:

That the Commission:

1. Approve, the final amendments to 10 CFR Parts 50 and 72 for publication in the *Federal Register* (Attachment 1).
2. Certify that this rule, if promulgated, will have no negative economic impact on a substantial number of small entities in order to satisfy requirements of the Regulatory Flexibility Act, 5 U.S.C. 605(b).
3. Note that
 - a. The Chief Counsel for Advocacy of the 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. The appropriate congressional committees will be informed.
 - c. A public announcement will be issued.
 - d. A regulatory analysis (Attachment 2) will be available in the Public Document Room.
 - e. This rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements.

- f. It is estimated that this action would result in an additional one-time NRC burden of no more than 80 staff hours.
- g. Upon Commission approval of the publication of the final rule, the staff intends to issue "Assuring Availability of Funds for Decommissioning Nuclear Reactors," Regulatory Guide 1.159, Revision 1 (Attachment 3).

/RA/

William D. Travers
Executive Director
for Operations

Attachments:

1. Federal Register Notice
2. Regulatory Analysis
3. Regulatory Guide 1.159, Rev. 1

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 50 and 72

RIN 3150-AG52

Decommissioning Trust Provisions

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations relating to decommissioning trust provisions for nuclear power plants. For licensees that are no longer rate-regulated, or no longer have access to a non-bypassable charge for decommissioning, the NRC is requiring that decommissioning trust agreements be in a form acceptable to the NRC in order to increase assurance that an adequate amount of decommissioning funds will be available for their intended purpose. Until recently, direct NRC oversight of the terms and conditions of the decommissioning trusts was not necessary because rate regulators typically exercised this type of oversight authority. With deregulation, this oversight may cease and the NRC needs to take a more active oversight role.

EFFECTIVE DATE: (Insert date 1 year after the date of publication).

FOR FURTHER INFORMATION CONTACT: Brian J. Richter, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone (301) 415-1978; e-mail bjr@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

In a staff requirements memorandum (SRM) dated August 10, 1999, the Commission directed the NRC staff to initiate a rulemaking to require that decommissioning trust agreements be in a form acceptable to the NRC in order to increase assurance that an adequate amount of decommissioning funds will be available for their intended purpose. This SRM was in response to SECY-99-170 (July 1, 1999), "Summary of Decommissioning Fund Status Reports," in which the NRC staff noted that it intended to continue to review decommissioning trust agreements in license transfers on a case-by-case basis and impose appropriate conditions in the orders approving these transfers. In response to the SRM, the NRC staff issued a rulemaking plan for Decommissioning Trust Provisions, SECY-00-0002, on December 30, 1999. The plan called for amending 10 CFR 50.75 and revising Regulatory Guide 1.159, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors." The Commission approved the plan on February 9, 2000, and directed the NRC staff to include specific trust fund terms and conditions necessary to protect funds fully in the rule itself. The Commission also suggested that sample language for trust agreements consistent with the terms and conditions within the rule be provided in the associated regulatory guide.

The NRC published a proposed rule for Decommissioning Trust Provisions on May 30, 2001 (66 FR 29244). That proposed rule required that the trust provisions be in a form acceptable to the NRC and contain general terms and conditions that the NRC believes are required to ensure that funds in the trusts will be available for their intended purpose. To accomplish this objective, the NRC proposed to modify paragraphs 10 CFR 50.75(e)(1)(i) and (ii), and to add a new paragraph, 10 CFR 50.75(h) to its regulations. The changes in §50.75(e) specify that the trust should be an external trust fund in the United States, established under a

written agreement and with an entity that is a State or Federal government agency or an entity whose operations are regulated by a State or Federal agency. Paragraph 50.75(h) discusses the terms and conditions that the NRC believes are necessary to ensure that funds in the trusts will be available for their intended purpose.

In response to a comment, paragraph 72.30(c)(5) has been modified for consistency with §50.75(e) and (h), as a conforming change. As an accompaniment to this rulemaking, the NRC has updated Regulatory Guide 1.159, to include sample trust fund language containing these terms and conditions. Draft Regulatory Guide DG-1106, the proposed revision 1 of Regulatory Guide 1.159, was published for comment along with the proposed rule.

II. Comments on the Proposed Rule

The Commission received 36 letters, from 34 commenters, containing approximately 280 comments on the proposed rule and draft regulatory guide. Seventeen of the commenters were licensees, 11 were representatives of utility groups (many of whose members are licensees), three were State agencies or commissions, one was the National Association of State Regulatory Utility Commissioners (NARUC), and two were investment management companies. Copies of the letters are available for public inspection and copying for a fee at the Commission's Public Document Room, located at 11555 Rockville Pike, Room O-1 F23, Rockville, Maryland 20852.

Documents created or received at the NRC after November 1, 1999, are also available electronically at the NRC's Public Electronic Reading Room on the Internet at <http://www.nrc.gov/reading-rm.html>. From this site, the public can gain entry into the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. These same documents also may be viewed and downloaded electronically via the interactive rulemaking website established by NRC for this rulemaking at <http://ruleforum.llnl.gov>.

1. General comments on the proposed action

Comments:

Several of the commenters supported the NRC's goal to maintain regulatory oversight over nuclear decommissioning trust funds, where necessary, and agreed that the NRC may need to take a more active oversight role regarding decommissioning trust agreements. Two other commenters commended the NRC for undertaking this rulemaking and fully supported the NRC's efforts to ensure that a utility industry made more efficient through competition remains a safe and reliable industry. Similarly, one commenter said it understands and agrees with the NRC's concern that the decommissioning trust corpus be safeguarded from investment risks. The Nuclear Energy Institute (NEI) stated that "Upon taking into account the comments and suggestions for improvement . . . , NRC's proposed rulemaking and proposed guidance likely will enhance the assurance for decommissioning funding already provided by the industry and should improve public confidence that all nuclear power reactors will be properly decommissioned." Ten commenters endorsed NEI's comments. One of those commenters also endorsed the comments submitted by Winston & Strawn on behalf of the Utility Decommissioning Group and the Tennessee Valley Authority. However, one licensee stated that the NRC should withdraw the notice of proposed rulemaking because existing regulations from the NRC, the Internal Revenue Service (IRS), and the State regulatory agencies are more than adequate to protect the public health and safety. In their view, the proposed rulemaking is duplicative of existing requirements and would add unnecessary regulatory burden without a corresponding safety benefit.

This licensee also believes that the proposed rule is inconsistent with the NRC's regulatory burden reduction initiative. Another commenter expressed similar views and stated that the proposed rule may eliminate some of the flexibility of the existing rule. Yet another commenter

opposing the rule said that if the NRC intends to continue to impose decommissioning funding conditions in individual licenses, there is no need for the rule.

Five commenters noted that given the wide variety of trust instruments in effect, it is fitting that the NRC not develop a uniform trust fund agreement that would be mandatory for all licensees. Another commenter stated that the NRC's proposed approach in adopting standard rules regarding decommissioning trust funds is superior to the existing NRC practice of applying specific license conditions on a case-by-case basis.

A commenter stated that NRC's discussion of Test 4 in the statement of considerations for the proposed rule describes that licensees "generally" prepare annual reports, etc. and does not specifically list annual calculation of the estimated cost as required by 10 CFR 50.75(b)(2). Further, the Test 4 description specifies that "...these reports can be supplied to the NRC upon request..." This availability upon request and the biennial reporting appear sufficient. The Test 4 discussion should justify removing 10 CFR 50.75(b)(2), or an explanation of the benefit of annual adjustments to the calculation vs. the biennial frequency of the funding status should be provided.

Response:

With respect to the comments calling for the NRC to withdraw the rule, the Commission does not intend to do so. The Commission's position, as stated in the proposed rule (66 FR 29244) is that, "Until recently, direct NRC oversight of the terms and conditions of the decommissioning trusts was not necessary because rate regulators typically exercised such authority. With deregulation, this oversight may cease and the NRC may need to take a more active oversight role." Given that the NRC will not require (except in the one instance where all power reactor licensees, both rate regulated and otherwise, will be required to notify the NRC in advance of decommissioning trust withdrawals if these withdrawals are made before to permanent cessation of operations) the trust provisions of this rulemaking to be imposed on those licensees

remaining under State or Federal Energy Regulatory Commission (FERC) regulation, the NRC does not interpret this action as being duplicative of existing requirements and adding unnecessary regulatory burden.

With respect to the comment stating that there would be no need for the rule if the NRC continues to impose decommissioning funding conditions in individual licenses, the NRC has always believed that it is preferable and more efficient to adopt standard rules, as opposed to applying specific license conditions on a case-by-case basis.

As for the comment on the discussion of Test 4 in the statement of considerations for the proposed rule and the commenter's request to remove 10 CFR 50.75(b)(2), the NRC was not proposing any change to that section by this action and no change is presently under consideration. The NRC still intends to require licensees to calculate their estimated decommissioning costs annually, even if these values are not required to be submitted to the NRC annually.

Following is a listing of the specific comments on the proposed rule and the NRC's response to them. The comments on the draft regulatory guide are then listed and discussed.

2. Applicability of the rule

Comments:

One of the most often repeated comments dealt with the proposed rule's requirement to be applicable to all licensees, even if they are under FERC or State regulation. The commenters said that the NRC should more clearly explain its conclusion that the proposed rule is necessary to ensure that decommissioning funds will be available when needed. There is no evidence that any reactor licensee has lacked adequate funds to safely complete the decommissioning process. In effect, licensees would have to expend resources to address a problem that has yet to occur. Because licensees are required to report on their funding levels to the NRC every two years (10

CFR 50.75(f)(1)), the reports already allow the NRC time to fashion an appropriate remedy, should one be necessary, to protect public health and safety. The NRC has not reviewed current practices by State or Federal rate regulators to establish a baseline for evaluating any possible changes in the management of decommissioning trust funds in response to deregulation. Another layer of regulatory oversight should not be added where adequate regulatory safeguards exist, such as FERC and/or State oversight. One commenter stated that its State Public Utility Commission (PUC) approved the commenter's decommissioning funding collections and permits funding of items not included in the NRC's definition of "decommissioning." Therefore, additional NRC requirements regarding the use of these funds would hinder the commenter's ability to access and use the funds as approved by the PUC and would unnecessarily intrude on local ratemaking functions that are an exclusive province of State governments.

Two commenters stated that the NRC should include a way for licensees to ascertain whether a conflict of applicable standards between the NRC's proposed rule and existing State and Federal regulations requires the execution of an entirely new trust agreement. Also, the NRC should convene a conference with FERC and NARUC to explore conflicts between existing standards and the NRC's rule.

One commenter stated that licensees who are State entities and who have additional safeguards under State law should be exempt from the proposed rule because it is based on the premise that deregulation will remove existing accounting and financial controls on owners of nuclear power plants. These commenters argued that this rule is not applicable to California Municipal Utilities Association (CMUA) members, who operate under the same regulatory and legal restrictions that applied before the changes to the electric utility industry in California. CMUA members are public agencies bound by the same stringent investment restrictions after deregulation as before.

Two commenters stated that the proposed rule is duplicative of Internal Revenue Code requirements and IRS implementing regulations, that place additional restrictions on the use of qualified nuclear decommissioning trusts. The commenters assert that existing IRS requirements are sufficient to protect the NRC's interest in the proper use of decommissioning funds. Under the IRS regime, licensees may experience tax advantages under the Internal Revenue Code section 468A by commingling funds for all decommissioning purposes and depositing them in a tax "qualified" fund. The NRC should explicitly permit the use of funds for all decommissioning purposes and eliminate barriers in its regulations to the full collection of funds authorized by rate-setting authorities.

Two other commenters asserted that the final rule should acknowledge the potential of transfers from non-qualified portions of the trust to the qualified portions without the NRC's notice or approval. Similarly, the scope of the proposed rule is not clear because it does not articulate whether the amendments are applicable to all nuclear decommissioning trusts (qualified and unqualified), or whether the amendments are intended to apply to trusts that accumulate funds for expenses not within the NRC definition of "decommissioning."

An organization representing the nuclear power industry stated that because there are a variety of ways for licensees to comply with the rule that are equally as binding as the terms of the underlying trust agreement, 10 CFR 50.75(h)(1) should be revised to allow licensees alternatives for achieving rule compliance by inserting the words "investment guidelines for, or other binding arrangements governing" so that it would read: "Licensees using prepayment or an external sinking fund to provide financial assurance shall provide in the terms of, investment guidelines for, or other binding arrangements governing, the trust, escrow account, Government fund, or other account used to segregate and manage the funds . . ."

Another commenter stated that it is not clear whether provisions in the proposed rule will supersede license conditions previously imposed in license transfer proceedings, or whether licensees with existing license conditions governing decommissioning trusts must apply to amend their licenses and whether these amendment applications would then be subject to hearings. The inference is that the proposed rule would be applicable to all existing and future reactors, as the rule is silent on the matter.

Response:

The NRC acknowledges that the proposed rule could be burdensome for licensees still regulated by PUCs and FERC, with no significant improvement in the public health and safety. Therefore, the final rule will only apply to licensees that are no longer regulated by State PUCs or FERC, with the exception that all power reactor licensees, both rate regulated and otherwise, will be required to notify the NRC in advance of decommissioning trust withdrawals if these withdrawals are made before permanent cessation of operations. The reason for this is that some licensees, even though continuing to be rate regulated, may make withdrawals without their rate regulator's knowledge. Given that any such withdrawals before permanent cessation of operations are likely to be very rare, the NRC believes that this requirement would not be burdensome. The NRC also excludes from this requirement any withdrawals from one decommissioning fund that are immediately deposited in another decommissioning trust fund either for one unit or between units (e.g., from a non-qualified to a qualified trust fund). This change would essentially eliminate the potential for conflicts of standards between NRC, and State and Federal regulations. These modifications also eliminate the need for a conference on this subject.

However, the NRC does not agree with the comments that IRS requirements are sufficient to protect the NRC's interest in the proper use of decommissioning funds because these

requirements relate primarily to tax treatment of decommissioning funds and may not be sufficient to satisfy the NRC's public health and safety concerns.

As to the comment on the suggested revision to 10 CFR 50.75(h)(1), the change has been made because the NRC recognizes the benefit of allowing alternatives for achieving rule compliance that do not have any adverse impact on the public health and safety.

With respect to the comment seeking clarification about whether the proposed rule supersedes license conditions, the NRC's position is that licensees will have the option of maintaining their existing license conditions or submitting to the new requirements.

Lastly, in response to the same commenter's second question, the rule is to be applicable to all present and future licensees that are or will no longer be under FERC or State rate regulation or that otherwise meet the NRC's definition of "electric utility," with the same exception as noted above. All licensees will be required to notify the NRC in advance of decommissioning trust withdrawals if these withdrawals are made before permanent cessation of operations or if they are not made under a post-shutdown decommissioning activities report or license termination plan.

3. Notifications and Disbursements

Comments:

The section of the proposed rule that generated the greatest number of responses (fourteen) from commenters related to notification of disbursements from the trust. Some commenters claim the 30-day notification is not needed because there is no basis for presuming that an independent trustee will disburse amounts held in the decommissioning trust fund for purposes other than those specified. The notification requirement would impose a significant regulatory burden on both the licensees and the NRC by creating a process for disbursement approvals for decommissioning funds without a public health and safety justification. There are no

standards to guide licensees and the NRC staff on whether a disbursement would be permissible. The 30-day disbursement notification would be a major burden on licensees during decommissioning and even during decommissioning planning because notifications would be required frequently.

The commenter stated that at most, the rule should require a one-time notification before initial withdrawals for decommissioning or planning. Also, licensees may incur charges waiting for NRC approval while labor and resources have been staged and ready to work. Trust vendors or service providers would not appreciate having to wait 30 days for payment with the added risk of possibly having the payment disallowed by the NRC. Further, there may be cases where relatively minor day-to-day expenses are incurred or where expenses must be paid promptly and NRC review is not required to meet the agency's regulatory concerns. If so, the NRC could add a *de minimis* exception. These commenters suggested that the NRC could prohibit funds from making two or more simultaneous disbursements of 0.99 percent of trust principal in order to avoid the notification requirement of the proposed rule. The NRC has not identified any case where improper disbursements have been made from a decommissioning trust and does not have enough staff to review invoices from decommissioning contractors that would only increase paperwork.

With respect to the 30 day disbursement notice under proposed 10 CFR 50.75(h), another commenter stated that "Licensees that have complied with the requirements of 10 CFR 50.82(a)(4) regarding submittal of a Post Shutdown Decommissioning Activities Report (PSDAR) and control trust fund disbursements in accordance with the provisions of 10 CFR 50.82(a)(6), (a)(7), and (a)(8), should be exempt from any further restrictions on disbursements." This commenter suggested that its modification to the proposed rule is particularly appropriate because it allows licensees to use the 3 percent of decommissioning trust

fund monies for planning activities before plant retirement as provided at 10 CFR 50.82(a)(8)(ii). There is little need for the NRC to require a 30-day advance notice from those facilities utilizing the trusts for pre-planning decommissioning activities. Also, the clarifying wording in Section 2.2.2.4 of DG-1106 needs to be included in 10 CFR 50.75(h)(1)(iii).

The commenter then suggested modifying proposed 10 CFR 50.75(h)(1)(iii) to allow plants in the process of being decommissioned to be grandfathered because the proposed requirement would not add any assurances that funding is available and would duplicate other notifications. Similarly, another commenter stated that 10 CFR 50.75 (h)(1)(iii) proposes to restrict disbursements or payments until final decommissioning has been completed. It is possible that State PUCs could require overfunded trusts to rebate money to ratepayers (rather than merely adjust the future collection rate). This commenter suggested that the rule should allow the NRC to approve such a disbursement following adequate review.

One commenter stated that NRC should revise the proposed 10 CFR 50.75(h)(1)(iii) to indicate the inclusion of nuclear decommissioning trusts (NDTs) in license transfers. In DG-1106, the NRC recognized that the 30-day notice should be provided to the NRC before disbursing funds, but should not apply to plants withdrawing funds under 10 CFR 50.82(a)(8)(i). This exception is not noted in the proposed rule. Another commenter stated that the proposed rule would duplicate reports for those plants active in decommissioning and that the rule should exempt those facilities involved in decommissioning under 10 CFR 50.82. Similarly, 10 CFR 50.75(h)(4) should be modified so that subsection (h) would not apply to any plant which already has an NRC-approved decommissioning plan. Another commenter stated that licensees who have docketed a PSDAR and a site-specific cost estimate under 10 CFR 50.82 should be exempt from the reporting requirements and adjustments to cost estimates of 10 CFR 50.75.

Several commenters noted that “ordinary expenses” or “ordinary administrative expenses” should be defined, and that those paid periodically from the trust should be exempt from the 30-day disbursement notification. Or, as a commenter noted, the NRC should clarify which specific expenses paid from a fund would require NRC notification. One commenter stated the definition should be consistent with Internal Revenue Code section 468A(e)(4)(B) where expenses are defined as “administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund.”

Response:

With respect to the comments on the 30-day notification for disbursements, the NRC needs to have this information in a timely fashion in order to effectively monitor licensees, especially when a licensee is not in decommissioning under the PSDAR or an approved license termination plan under 10 CFR 50.82.

Another concern with the 30-day disbursement notice was the problems it would potentially cause for licensees during the process of decommissioning or decommissioning planning. The proposed rule did not explicitly indicate that licensees who have complied with 10 CFR 50.82(a)(4) would be exempt from restrictions on disbursements. The NRC agrees with this comment and this change has been made in the final rule because, as a commenter noted, the proposed requirement would not add any assurances that funding is available and would duplicate notification requirements at § 50.82.

The next comments focused on the need for definitions of “ordinary expenses” and “ordinary administrative expenses.” The NRC, as a matter of consistency and expediency, decided to make use of the IRS Code section 468A(e)(4)(B) definition of expenses where they are defined as “administrative costs (including taxes) and other incidental expenses of the fund

(including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund.”

For clarification and consistency, the final rule includes the words of Section 2.2.2.4 of DG-1106 in 10 CFR 50.75(h)(1)(iii), as suggested by one commenter. Further, the rule language has been changed throughout from “30 days” to “30 working days.”

4. Restrictions on Funds

A. “Investment Grade.”

Comments:

Another major area of concern for twelve commenters in the proposed 10 CFR 50.75(h)(1)(i)(B) was the requirement that the trust hold only “investment grade” securities. As one commenter noted, a requirement of “investment grade” investments in the trust is unnecessary because of applicable standards under State law, the proposed 10 CFR 50.75(h)(1)(i)(C), and the “prudent investor” standard used and defined by the FERC. Adoption of a different standard by another regulatory agency would be problematic. The “prudent investor” standard should apply in situations where other regulators have not mandated an investment standard or specific investment restrictions to eliminate the possibility of conflicts between NRC and other requirements. Also, this requirement goes beyond conditions imposed in license transfer orders. Another commenter suggests that the “investment grade” standard apply at the time of purchase and not require immediate sale of the investment at the time of downgrade. This commenter stated that the use of the term “investment grade” in the proposed rule is not necessary and that the “prudent investor” standard, as defined in FERC regulations should be used. “Investment grade” is not clearly defined in the regulation, would be subject to the vagaries of future regulatory interpretation, and is unnecessarily restrictive.

Response:

The NRC agrees that the term “investment grade” is redundant because the “prudent investor” standard is an appropriate standard defined by the FERC. (Equivalent standards established under State law would also be acceptable.) Therefore, “investment grade” was deleted from the final rule and “prudent investor” is used in its place.

B. Investment in nuclear power reactor licensees.

Comments:

Five commenters called for the elimination of the prohibition of a trust ownership of securities of other nuclear power reactor licensees, or for the NRC to set a limit on the amount of assets in entities owning one or more nuclear power plants. These commenters argued that the NRC has not provided a clear basis for categorically excluding investments in any entity with an ownership interest in a nuclear power plant. According to another commenter, the proposed prohibition in a trust’s ownership interest in “one or more nuclear power plants” should be deferred to applicable investment guidelines under State law. One commenter stated that, by prohibiting investment in securities of other nuclear power plant licensees, NRC is implying the ownership of a nuclear power reactor is a risky investment. The commenter also stated that such a prohibition was possibly out of the NRC’s jurisdiction. Further, placing these restrictions on fund managers is not practical and has no clear connection to protection of the public health and safety. Any final rule should permit a *de minimis* investment in otherwise prohibited securities.

The proposed “nuclear securities” restriction is very ambiguous as it would apply to fixed income investments. Investment opportunities that are limited by ambiguous regulations will unnecessarily result in lower investment returns than otherwise would be the case. Still another commenter pointed out that the proposed restriction on ownership of securities with nuclear exposure is inconsistent with use of the “prudent investor standard.”

One commenter noted that public systems are concerned that the proposed rule not be used to prevent a municipal licensee from investing in securities issued by the State government, another municipality, or other instruments of the State in which the municipal licensee is located. If the NRC rejects this proposal, the commenters request that debt securities and like instruments already held in decommissioning trust accounts be exempted from this restriction.

Seven commenters opined that 10 CFR 50.75(h)(1)(i)(A) should be modified to clarify the term "non-nuclear sector mutual funds" and to permit investments in bank-maintained nonnuclear sector collective or commingled funds, such as "Common Trust Funds." One commenter did not find the proposed 10 CFR 50.75(h)(1)(i)(A) clear with respect to "any other entity owning one or more nuclear power plants" and asked: Is the rule intending to allow investment in securities of an entity that is part owner of a nuclear power plant? Is the rule intending to disallow investment in a mutual fund in which 2 percent of the fund is invested in securities of a parent company whose subsidiary is a minority owner of a foreign or domestic nuclear power plant? Is the term "nuclear power plant" inclusive of those being decommissioned and those licensed to operate?

One final related comment was that licensees, and trustees in the absence of directions from licensees, should be authorized to prudently allocate trust assets across the entire risk/return spectrum. Prudent diversification can be beneficial for all stakeholders.

Response:

The proposed prohibition of ownership in securities of other nuclear power reactor licensees was instituted to forestall members of the nuclear industry from solely investing their nuclear decommissioning funds in each other's securities. Contrary to one commenter's position that the prohibition implies that nuclear power is a risky investment and possibly out of the NRC's jurisdiction, the NRC believes that this requirement is consistent with fund diversification.

The NRC agrees with the suggestion that the requirement permit a *de minimis* investment in otherwise prohibited mutual fund investments. The final rule sets the *de minimis* level at 10 percent of the total value of a decommissioning trust account, at or below which investments in securities of companies owning nuclear power plants would be allowed.

With respect to the comment referring to the ambiguity of the proposed restriction as it would apply to fixed income investments, the Commission continues to believe that such a restriction should apply. However, because the rule will not apply to licensees that meet the definition of “electric utility” and that a *de minimis* level of investment is now permitted, any effect of such a restriction should be substantially mitigated.

As to the comment suggesting that the proposed prohibition in the trust’s ownership of municipal or State-owned nuclear power plants be deferred to applicable State law, by having the rule apply to only those licensees meeting the NRC’s definition of “electric utility” that includes cooperatives and public power entities, this issue is rendered moot. The concern relating to the proposed rule not allowing a municipal licensee from investing in securities issued by a State government is likewise rendered moot. The NRC notes that even if the proposed rule were adopted as written, it would not have prevented municipal licensees from investing in State instruments as long as those instruments were not specifically tied to the nuclear plants.

Some commenters wanted clarification of the term “non-nuclear sector mutual funds.” This term can be understood in the context of the NRC’s definition of “nuclear sector mutual funds.” The NRC interprets these funds as being ones in which the fund invests primarily in entities owning nuclear power plants. Funds that invest in electric utilities would be nuclear sector mutual funds if the majority of the value of securities were from NRC licensees. As stated

previously, a licensee may invest in nuclear sector mutual funds as long as its share of the licensee's portfolio is less than 10 percent.

In response to some of the specific questions asked, the NRC considers partial owners of a nuclear power plant to be the same as full owners and thus should be counted within the 10 percent *de minimis* restriction for their respective shares of decommissioning trust assets. The rule will disallow investment in a mutual fund in which at least 50 percent of the fund is invested in securities of a parent company whose subsidiary is an owner of a domestic nuclear power plant either fully or partially. Similarly, the term "nuclear power plant" is inclusive of those being decommissioned and those licensed to operate.

C. Fund management.

Comments:

One commenter stated that the proposed 10 CFR 50.75(h)(1)(i)(D) should be deleted. The commenter's position is that the "prudent investor standard" implies that if the trusts may be more broadly diversified to include alternative investments such as private equity, then the company should be able to select funds and managers it considers the best qualified. This is not "day-to-day" management of the funds, but strategic management of the funds. Virginia Electric and Power Company suggested that day-to-day investment decisions should be defined as "the hands on management of a stock or bond portfolio, which includes making decisions to buy and sell individual stocks and bonds." It should not include formation of the trust's investment policy and the selection of investment advisors, mutual funds, pooled funds, collective funds, and limited partnerships. Licensees should be empowered to make strategic decisions to ensure that the best strategies and advisors are employed for the trust. Licensees' interests are aligned with those of the trust, they have superior knowledge of the decommissioning liability, and they have a broad base of financial and investment expertise. Requiring a third party manager to administer

strategic investment decisions when the utility is well qualified to do so is fiscally inefficient and increases the cost of managing the funds.

Similarly, several commenters stated that the NRC should more specifically define the “day-to-day management” activities that would be prohibited by the rule. Alternatively, these commenters suggested that the NRC eliminate this prohibition entirely and allow licensees to prudently determine the level of their involvement necessary to adequately administer their decommissioning trust. Also, under the proposed 10 CFR 50.75(h) the NRC could interpret a trust investment direction as being “day-to-day investment management control” and cause the trust to pay for external investment management services to direct the trusts investment. This prohibition is overly broad. Licensees should be allowed to give some direction to fund managers when it comes to the licensee’s decommissioning fund. A commenter suggested that this prohibition be eliminated, or, if the NRC has examples where licensees who have outside managers have engaged in “day-to-day management” of the fund in a detrimental way, this prohibition should be better defined. Another stated that the proposal is overly burdensome in that it would increase costs without providing any added protection of the public health and safety.

Several commenters stated that the NRC’s proposed limitation on licensee involvement in investment decisions in 10 CFR 50.75(h)(1)(i)(D) should be changed to restrict licensees from engaging in this activity, rather than trustees who do not ordinarily engage in this type of activity. Also, it would require licensees to spend more money to use commercial investment management services without an adequate explanation from the NRC as to whether the benefits to be derived from this requirement, if any, would outweigh the added regulatory burden that would result. These commenters also stated that governmental agencies should be granted an exception from 10 CFR 50.75(h)(1)(i)(D) when decommissioning trust fund investments, as directed by the governmental agency, are limited to investments permitted for the investment of public funds

under applicable State law. Further, the selling of the investments could conflict with an existing contract or require a licensee to suffer additional compliance costs. The NRC must recognize and accommodate circumstances when current State law already provides sufficient safeguards.

These commenters concluded that 10 CFR 50.75(h)(1)(i)(D) would add costs, reduce accountability, and is unnecessary to achieve the stated purposes of the proposed amendments.

Similarly, another commenter stated that the proposed rule is flawed because it limits the right of public power owners to direct trust fund assets to investments that are permitted and regulated under State and local law, (e.g., investments in securities issued by the State government of a municipal licensee or other State or local municipality) the selling of which would conflict with an existing contract or require a licensee to suffer additional compliance costs without Federal compensation, or that might affect the rights of public power minority owners upon license transfers of owner-operators. Two commenters said that an exception should be made to 10 CFR 50.75(h)(1)(i) for political subdivisions of States when investment management is addressed by State statute and meets “prudent man” standards.

One commenter representing several licensees suggested adding the following to the proposed 10 CFR 50.75(h)(1)(i)(D): “. . . , except in the case of passive fund management of trust funds where such management is limited to investments tracking market indices.” The commenter stated that this would permit passive index fund management by a licensee, its affiliates or subsidiaries, but would not constitute “day-to-day management.” Passive index funds replicate the performance of established index funds and do not require active or day to day stock or security selection. Commenter asserted that these funds also satisfy the “prudent investor standard.” Further, this activity could provide substantial cost savings to licensees, because the licensee, rather than an outside fund manager, can perform the mechanics necessary to participate in the index fund at a savings to the decommissioning trust fund. The commenter

stated that the bottom line is that it is cheaper to run large amounts of index funds in-house by the sponsor than pay an investment manager several basis points to perform the same function.

Response:

The Commission agrees with many of the comments raised in this section. For example, the limitation on fund management in the final rule was modified to state that licensees may provide day-to-day direction to the trustee for buying and selling index funds, such as “Standard and Poors 500.” The final rule was further modified as the result of another comment by restricting licensee involvement in investment decisions as opposed to trustee involvement as was originally proposed. The comments calling for an exception for licensees that are governmental agencies or for licensees located in States in which State statutes mandate investment management were addressed in the final rule by specifying that §50.75(h)(1) applies to those licensees that are not “electric utilities.” Governmental agencies, by the NRC’s definition in §50.2 are considered electric utilities as are those licensees still under State regulation. The NRC agrees with the last comment that suggested a modification which would permit passive index fund management by a licensee, its affiliates or subsidiaries, and the final rule was changed accordingly. The proposed solutions have no negative impact on public health and safety, but they provide savings and efficiencies, and clarity compared to the proposed rule. Changes have been made in the regulatory guide to reflect these modifications.

D. Credit for decommissioning trust earnings.

Comments:

Five commenters stated that NRC should allow licensees to take credit for decommissioning trust earnings through the entire projected decommissioning period. Other commenters stated that, even if a plant is dismantled and decommissioned after shutdown, the credit should be allowed during the dismantlement period because decommissioning activities will

not be completed immediately after the termination of operation. Also, licensees should be allowed to assume up to a maximum of ten years of earnings credit through the decommissioning period. One commenter suggested modifying the proposed 10 CFR 50.75(h)(1)(iii) because in DG-1106, the NRC recognized that the 30 day notice should be provided to the NRC before disbursing funds but should not apply to plants withdrawing funds under 10 CFR 50.82(a)(8)(i). This exception is not noted in the proposed rule. The commenter also noted that their modification to the proposed rule is particularly appropriate because it allows licensees to use the 3 percent of decommissioning trust fund monies for planning activities before plant retirement as provided at 10 CFR 50.82(a)(8)(ii). There is little need for the NRC to require a 30-day advance notice from those facilities utilizing the trusts for pre-planning decommissioning activities. Another commenter noted that NRC should permit all licensees to take credit for expected earnings during operation using the 2 percent figure during the decommissioning period, at least for the period coincident with DECON (i.e., approximately 7 years). This interpretation should also apply for a greater period if the licensee submits appropriate preliminary site-specific cost estimates and/or decommissioning planning information to the NRC.

Two commenters stated that 10 CFR 50.75(e)(1)(i) and (ii) should be modified to allow credit for decommissioning trust earnings during periods of safe storage, final dismantlement, and license termination, regardless of whether a licensee uses a site-specific cost estimate or the NRC “formula amount.”

Lastly, a commenter noted that one possible interpretation of the regulations does not take into account the actual process by which decommissioning will occur. As a consequence, a licensee could end up collecting substantially more money than would be necessary for decommissioning funding simply because of unrealistic assumptions concerning the timing of decommissioning and expenditures for decommissioning shutdown. However, a licensee is not

going to expend all decommissioning funds immediately after shutdown. Even when the licensee adopts an immediate dismantlement option for decommissioning, that process will still require several years to complete decommissioning. Although the withdrawals from the fund would be made on an ongoing basis, the assets retained would continue to grow. The commenter asserted that given the NRC's interpretation, licensees are being compelled to collect millions of dollars more during plant operation than will be necessary, even under the most conservative assumptions regarding the timing of decommissioning. The commenter suggested that clarification is needed regarding credit for projected earnings during periods of safe storage, final dismantlement, and license termination in the rule because the regulatory guidance is creating a requirement not directed by the rule.

Response:

First, it should be noted that §50.75(e)(1) and (2) also require full funding of decommissioning "at the time termination of operation is expected." Thus, the commenters have not provided a complete picture of the situation. Second, the generic formulas are based on immediate dismantlement as the assumed method of decommissioning. Therefore, those licensees certifying to formulas can not take a 2-percent credit into a SAFSTOR period. However, a 2-percent credit can be used when a site-specific estimate is explicitly based on deferred dismantlement. Third, credits may be timed for outlays for decommissioning expenses. Licensees certifying only to the formula amounts (i.e., not a site-specific estimate) can take credit into the dismantlement period (e.g., the first 7 years after shutdown.)

E. Modifications to trusts.

Comments:

Eight commenters stated that the NRC should define what is meant by a "material" modification to a trust that would require a 30-day advance notification to the NRC in more detail.

If the proposed rule is adopted as written, the redundant reporting requirements should be deleted. The commenter further stated that the 30-day notification for licensees making material changes to trust agreements should not apply to those changes caused by State or Federal mandated changes. Lastly, the NRC should be required to notify licensees if there were no objections to proposed amendments.

Two commenters noted that the NRC should be aware that certain amendments to trust agreements in the proposed rule may require PUC approval. As an example, two other commenters noted that their PUCs approved the way the different types of decommissioning funds are handled in a single external trust, and any significant change in this handling would require PUC notification and review. Therefore, the commenters wish to be able to continue with this commingling of funds through the completion of the commenters' plant decommissioning. The proposed 10 CFR 50.75(h)(1)(iii) would preclude such a commingling of funds in a single external trust account, because withdrawals from the fund under the proposed rule would be allowed only for radiological decommissioning costs. The commenter is concerned that the withdrawals it has been able to make would not be possible under the proposed rule, even though NRC has pre-approved: (1) the construction and associated costs of a dry storage facility; (2) the schedule for this construction and for incurring these costs; and (3) the schedule for and manner of (commingling) accumulating funds to cover these costs.

Two commenters suggested an addition to the rule that “. . . any amendment to the license of a utilization facility which does no more than delete specific conditions relating to terms and conditions of decommissioning trust agreements involves ‘no significant hazards consideration.’” The commenters stated that licensees should be provided relief from any conflicts or inconsistencies between the final rule and specific license conditions. Licensees that currently have separate license conditions in this area should have the option to amend their licenses to

remove those conditions. The commenters also stated that a generic finding of no significant hazards consideration would facilitate the review and approval of these administrative amendments.

Response:

The NRC's definition of "material" modifications includes actions such as a change of a trustee, changes of provisions relating to withdrawals from the trust, changes relating to the beneficiary, changes relating to the duration or term of the trust, or other changes potentially affecting the ability of the trust agreement to provide reasonable assurance of decommissioning funds. Modifications that are not material would include, for example, changes in fee structures paid to a trustee, changes in arbitration provisions between the trustee and the licensee, changes in the investment advisor, if applicable, or investments, provided the changes comply with other aspects of this rule.

As to the second comment in this section relating to PUC approval, it has been noted that much of this rule will not apply to licensees under PUC regulation. Further, with respect to commingling of funds, the Commission does not object to that practice as long as the licensees are able to provide a separate accounting showing the amount of funds earmarked for radiological decommissioning versus utilities not subsumed under the NRC's definition of decommissioning in 10 CFR 50.2.

The last comment suggested an addition to the rule to provide relief from any conflicts or inconsistencies between the final rule and specific license conditions. Licensees will be able to decide for themselves whether they prefer to keep or eliminate their specific license conditions. Because these changes would be to conditions that resulted from license amendments (i.e., license transfers) that already generically involve "no significant hazards" considerations, any

amendments to conform or eliminate these conditions would likewise involve “no significant hazards.”

F. Foreign Trustees.

Comments:

Two commenters stated that the rule should not preclude foreign financial institutions from serving as trustees (proposed 10 CFR 50.75(e)(1)(ii)) if a licensee can demonstrate that there would be an equivalent level of assurance. The proposed amendment to §50.75(e) would require the trust to be overseen by an entity that is an appropriate State or Federal government agency or whose operations are regulated by a State or Federal agency. The commenters also stated that clarification is needed as to what this amendment would actually require, who would qualify as an appropriate agency, and what role that agency would have in the administration of the decommissioning trust. The amendment would also preclude the use of an insurance product, which the NRC presently allows, to satisfy decommissioning funding requirements. Many of the presently used insurance companies are domiciled outside of the U.S. The commenters further stated that it is not clear why there should be a requirement that only companies regulated by State or Federal agencies can be trustees for decommissioning purposes, when such a requirement does not apply to insurers used to satisfy financial assurance requirements for operating reactors.

Response:

A licensee may have a foreign financial institution serving as trustee if the licensee can demonstrate to the NRC that there would be an equivalent level of assurance as there would be under a U.S. trustee. At a minimum, the foreign trustee would need to have a business branch in the U.S. that is regulated by a State or Federal entity. Also, the amendments in these regulations

only apply to trust agreements, not insurance coverage. Thus, licensees who choose to use insurance for decommissioning assurance may use foreign insurers.

G. Non-radiological decommissioning funds.

Comments:

Seven commenters stated that the proposed 10 CFR 50.75(h)(1)(iii) fails to acknowledge the possible accumulation of trust funds for purposes of funding spent fuel management and non-radiological decommissioning costs, but that such an accumulation should be encouraged by the NRC. Several of the commenters suggested that restrictions should not apply to funds held in trust for purposes other than radiological decommissioning, e.g., spent fuel storage or non-radiological decommissioning costs. The commenters asserted that a licensee cannot completely fulfill its NRC regulatory decommissioning obligation while fuel resides in the spent fuel pool and in keeping with the principle that the beneficiaries of the plant's production should pay the full life-cycle costs, respectively. Collection of these funds is usually encouraged or required by PUCs. Also, complete "greenfield" decommissioning is usually required if the property is not owned by the licensee. The commenters stated that if the NRC determines that these funds should be placed in separate trusts or sub-accounts to avoid the proposed restrictions, the NRC should provide licensees an opportunity to move these funds into separate trusts or accounts before the implementation of the new rule.

Alternatively, a commenter noted that NRC should clarify that the proposed 10 CFR 50.75(h)(1)(iii) disbursement restrictions apply only to funds held in trust for radiological decommissioning, not non-radiological decommissioning. Some decommissioning trust funds are required by non-NRC regulatory agencies to include decommissioning activities that NRC does not require and their estimates would then exceed those of the NRC. The commenter wishes to ensure its continued ability to protect ratepayers from any financial risks associated with nuclear

decommissioning. However, the proposed 10 CFR 50.75(h)(1)(iii) would restrict disbursements from the trust, escrow account, Government fund, or other account to ordinary administrative expenses, decommissioning expenses, or transfer to another financial assurance method until final decommissioning has been completed. The commenter suggested that even though separate trust funds could theoretically be established for NRC radiological decommissioning and other decommissioning activities, it would not necessarily be practical or cost-effective to require the physical demolition and waste disposition work activities to institute artificial accounting to ensure which fund pays for which activities. Likewise, if demolition funds were estimated assuming an area might be radiologically contaminated, those funds would have to be transferred to a different trust fund in order to pay for demolition if the area was determined to not be contaminated during the actual decommissioning.

Two commenters noted that the proposed rule and draft guidance restrict the use of the trust funds for specified purposes including “decommissioning expenses.” The NRC’s definition of “decommissioning” excludes a range of public benefit activities that rate-setting authorities often find necessary and appropriate for public funding, e.g., returning a site to “greenfield” condition. The commenters stated that the proposed rule and guidance must clearly state that a nuclear decommissioning trust may disburse funds for these other purposes as long as funds have been authorized by a public rate-setting authority, such as a PUC, and have been collected for these purposes.

Additional commenters also noted that the NRC’s rules on the use of decommissioning trust funds should permit cleanup of non-radiological substances and structures. Dual jurisdiction over the nuclear power industry gives States the authority over the economics of nuclear generation costs. New York State has exercised this authority by allowing utilities to place collected monies from ratepayers in the decommissioning trust funds to pay for both the

radiological and non-radiological segments of the decommissioning process. These commenters suggested that the NRC should clarify that the funds may be used to remove non-radiological substances and structures, and restore the sites back to greenfield conditions. Also, the NRC should allow licensees to withdraw funds for non-radiological purposes before the completion of the radiological decommissioning activities.

For about 8 years, another commenter has been withdrawing monies from its trust fund under 10 CFR 50.82(a)(8)(i), as necessary to accomplish radiological decommissioning activities, spent fuel management activities, and some non-radiological decommissioning activities according to the expenditure schedule detailed in the plant-approved cost estimate and funding plan. This commenter stated that combining radiological decommissioning, non-radiological, and spent fuel funds has been economically and functionally advantageous.

Response:

The first comment in this section calls on the NRC to encourage the accumulation of trust funds for the purposes of spent fuel management and non-radiological decommissioning costs. The collection of funds for spent fuel management is already addressed in 10 CFR 50.54(bb) where it indicates that licensees need to have a plan, including financing, for spent fuel management. Any NRC requirements with respect to the accumulation of funds for non-radiological decommissioning costs would be beyond the range of the NRC's legal authority. The NRC does not object to licensees mingling funds for decommissioning activities as defined by the NRC and for other activities outside the NRC's definition. However, if funds are mingled in this way, licensees need to ensure that separate sub-accounts are established so funds for each type of activity are appropriately identified.

As to the statement made by commenters that restrictions should not apply to funds held in trust for purposes other than radiological decommissioning, the Commission's position is that

withdrawals for non-radioactive decommissioning expenses that do not affect the amount of funds remaining for radiation decommissioning costs are not covered by this rule. However, the Commission is not proposing that licensees institute separate trusts to account for the different types of activity. The Commission appreciates the benefits that some licensees may derive from their use of a single trust fund for all of their decommissioning costs, both radiological and not; but, as stated above, a licensee must be able to identify the individual amounts contained within its single trust.

The remainder of the comments relating to State jurisdiction and licensees already in decommissioning become moot because this rule will not apply to licensees under State or FERC regulation or to licensees withdrawing monies under 10 CFR 50.82.

H. Implementation of the new rule.

Comments:

Eleven commenters noted that the proposed rule does not contain any plans for transition from the existing provisions to the new requirements. The rule provides neither a period for an effective date nor any plans for transition from existing trust agreements to the requirements of the proposed rule. These commenters stated that it is also not clear if the new rule only applies to licenses in a deregulated environment or licensees who are pursuing renewal or license transfer of all licenses. The NRC should clarify what actions licensees must take with regard to existing trust agreements and when these actions must be completed if the proposed rule becomes final. The NRC should allow licensees sufficient time to review and conform trust documents to comply with the final rule to avoid, or at least minimize, adverse financial impact on decommissioning funds resulting from compliance with the proposed rule. These commenters suggested that grandfathering or a reasonable transition period should be allowed for existing decommissioning funding arrangements that cannot be amended or terminated without substantial penalties.

One commenter stated that the implementation period should be no shorter than 90 days and that the rule should permit case-by-case extensions where there is good cause. A second commenter stated that a transition period of at least six months before the new requirements are made effective is needed. Another commenter suggested that the implementation period should be extended to a period of “not less than one year” because a small number of trustees act for a large number of licensees and their trusts. Still another commenter stated that the NRC needs to clearly state its expectations regarding when licensees are expected to modify their trust documents to conform to the proposed rule. The commenter proposed that for plants not undergoing license transfer or license renewal, a two-year period should be specified to allow for a smooth transition to the rule, following its effective date.

Another commenter pointed out that changes may require other non-NRC regulatory approvals. Still another commenter stated that the NRC should make it clear that its silence as to a proposed disbursement, or its approval after objection, will have no effect upon parties’ rights under contracts or other regulations governing the expenditure of decommissioning funds. Lastly, another commenter suggested that the proposed investment limitations should be implemented to all new investments 90 days following the implementation of the rule. This commenter noted that requiring changes to the existing portfolios would result in increased costs because of the fees and there are potential tax consequences. The last comment on this point stated that the implementation statement could include a clause requiring implementation of the rule if ownership will be changing or before elimination of State and FERC oversight of decommissioning funding during the implementation period.

Response:

The Commission has decided that the implementation of this rule will be one year from its date of publication in the *Federal Register*. This should be sufficient to help licensees avoid

negative financial impacts on the decommissioning funds. With respect to the point on parties' rights under contracts, the NRC does not believe that this rule will interpose the NRC in contractual disputes that do not affect protection of public health and safety. The last comment in this section is rendered moot because the rule will not, in general, apply to licensees under FERC or PUC regulation, or who otherwise meet the NRC's definition of "electric utility."

I. Backfit.

Comments:

A few commenters stated that the proposed action was, in fact, a backfit, contrary to the NRC's stated position. Therefore, a backfit analysis is required because the NRC already requires a decommissioning fund to be segregated from a licensee's assets and outside its administrative control, and permits withdrawals only for legitimate decommissioning expenditures. These commenters further stated that because the NRC is capable of imposing additional conditions when necessary in license transfer proceedings, the proposed rule does not appear necessary to protect the public health and safety. These commenters asserted that the NRC should not seek to invoke the "adequate protection" exception to the Backfit Rule in this case, but should perform the requisite analysis of costs and benefits under the standards of 10 CFR 50.109(a)(3).

Another commenter stated that an adequate backfit analysis has not been performed because the analysis does not mention how this 30-day notice before fund use during actual decommissioning activities will adversely affect licensees. This commenter asserted that the reliance on the effect of the loss of PUC/FERC jurisdiction and oversight due to deregulation fails to acknowledge or consider that many licensees are not deregulated and may never be fully deregulated. The NRC has not articulated why existing rules fail to ensure adequate protection and no example is given of a licensee who lacked financial assurance to complete

decommissioning in a safe and timely manner. This commenter further stated that the NRC has not provided any analysis of how the NRC could more effectively ensure the availability of adequate funds for decommissioning in a more efficient and less restrictive manner.

Response:

The NRC believes that by eliminating most of the requirements that “electric utility” licensees comply with the rule and by explicitly eliminating the requirement to provide advance notification of decommissioning fund expenditures when §50.82 applies, the backfit concern is eliminated. Most of the comments related to the possibility of dual regulation, which is not the case under this final rule. Further, the rule language has been changed from “30 days” to “30 working days.”

5. Other Comments

The following comments were submitted by one commenter each and do not fit into one of the major categories listed above.

Comment:

The proposed rule does not correspond to the “Discussion” and “Section-by-Section Analysis” in the Federal Register notice. The rule’s “Discussion” section focuses entirely on decommissioning trusts, but this focus is not reflected in the proposed rule. It is particularly unclear if the use of decommissioning trust funds is mandatory under 10 CFR 50.75(e) or if other less formal arrangements are also acceptable. The commenter recommends that use of the trust funds be mandatory unless there are compelling reasons that less formal arrangements can provide equivalent protection. The rule’s “Discussion” section focuses entirely on decommissioning trusts, but this focus is not reflected in the proposed rule.

Response:

After 1988 and as amended in 1998, the NRC, under 10 CFR 50.75 has allowed a variety of financial assurance mechanisms. However, virtually all nuclear power reactor licensees have decided to make use of decommissioning trusts; hence, the focus and emphasis on trusts in this rule.

Comment:

“ . . . (T)he proposed rule itself would not require decommissioning trusts. An arrangement that is not a trust will not have a trust instrument and may not entrust decommissioning funds to someone with the fiduciary obligations of a trustee.”

Response:

As stated above, virtually all nuclear power reactor licensees have decided to make use of decommissioning trusts; hence, the focus and emphasis on trusts in this rule.

Comment:

Proposed 10 CFR 50.75 (e)(1)(i), states that “Prepayment is the deposit . . . of cash or liquid assets . . .” It then goes on to state that “Prepayment may be in the form of a trust, escrow account, Government fund, certificate of deposit, deposit of government securities, or other payment acceptable to the NRC.” This commenter claims that “Trusts,” “escrow accounts,” and “Government funds” are not forms of prepayment.

Response:

“Trusts,” “escrow accounts,” and “Government funds” may be used as forms of prepayment as long as they are established in accounts that are independent from the licensee. Further, certificates of deposit and deposits of Government securities are among those securities that could be deposited in a prepayment account.

Comment:

A commenter claimed an inconsistency on several bases between the words of the proposed §50.75 (e)(1)(i) “ . . . trust, escrow account, Government fund, certificate of deposit, deposit of Government securities, or other payment shall be established pursuant to a written agreement . . .” versus the following words in the “Section-by Section Analysis:” “The sentence would call for the trust to be an external trust fund held in the United States, established pursuant

to a written agreement . . .”. First, the commenter noted that “the apparent intent of the rule is to require decommissioning trusts for both prepayments and external sinking funds. Escrow accounts and certificates of deposit are not the same as trusts, although a certificate of deposit could be held within a trust.” Next the commenter stated that the language is “confusing” in that “government funds, certificates of deposit, government securities and other payments are not ‘established pursuant to a written agreement’ but rather are types of funding.” The commenter was not aware of licensees using Government funds for their decommissioning funding. The commenter stated that if these arrangements do not exist and are not expected to be created, the rule should be modified to delete any reference to them. However, if that is not the case and these arrangements do exist, the rule should be written to allow use of Government funds if they ensure the same level of certainty as decommissioning trusts.

Response:

A major portion of the response to this comment is contained in the previous response. The intent of the rule is not to require decommissioning trusts for prepayments and sinking funds, but to focus on making these trusts stronger. As indicated, the rule focuses on external trusts because almost all licensees use them. However, the final rule has been modified to state that similar provisions are to be included in escrow accounts and Government funds. Although the commenter apparently was not aware of licensees using Government funds for their decommissioning funding, one State has essentially established a Government fund for the nuclear plant located in its State.

Comment:

The same commenter stated that “Government funds are, however, typically within the control of government bodies and may be used for the purposes allowed by law. Judicial

enforcement of amended statutory provisions could be much more problematic than judicial enforcement of a trust agreement.”

Response:

NRC has traditionally granted deference to State ratemaking mechanisms. However, case law has long established Federal preeminence with respect to protection of public health and safety under the Atomic Energy Act of 1954, as amended.

Comment:

A commenter stated that “If sinking fund payments and prepayments into external decommissioning trusts are used by virtually all nuclear power plant licensees . . . , there would appear to be no good reason for confusing language that would allow less certain arrangements to maintain decommissioning funds.”

Response:

After 1988 and as amended in 1998, the NRC, under 10 CFR 50.75, has allowed a variety of financial assurance mechanisms. However, virtually all nuclear power reactor licensees have decided to make use of decommissioning trusts; hence, the focus of this rule on trusts. The NRC sees no need to limit the licensees’ available options that the NRC has determined provide equivalent levels of assurance.

Comment:

The Commission should clarify that replenishment of a decommissioning working capital fund would be a permissible disbursement from the decommissioning trust fund.

Response:

Because the rule will not apply to those licensees operating under 10 CFR 50.82, the point is moot.

Comment:

The disbursement process should provide an option for a licensee to be the party presenting the request for disbursements and the party to disburse the funds, rather than the fund trustee. Compliance with the regulations may result in significant cost for a licensee. Along these lines, the commenter believes that the NRC's estimate of 40-80 hours being required for a licensee to revise its trust agreement to comply with the proposed regulations is "unduly low." If the rule would result in a loss in the value of the fund, the existing trust arrangement should be "grandfathered" or the licensee should be able to seek a waiver from NRC on this requirement.

Response:

The NRC agrees with the proposed option for a licensee to be the party presenting the request for disbursement and the party to disburse the funds. The change has been made to the rule to reflect this option. Even though there was only one commenter who questioned the 40 to 80 staff-hour estimate to revise a trust agreement and the Commission believes that its estimate was within the range anticipated by the other commenters, it has increased the estimated range up to 60 to 120 hours. The last comment referred to a potential loss in fund value because of the rule. The Commission does not see this as being a problem because of the allowance of *de minimis* levels of certain types of investments and the one-year implementation of the rule.

Comment:

The proposed rule does not make clear if the transfer of nuclear plant ownership interests would be facilitated by more uniform decommissioning trust agreements, or if the NRC's intends to require uniform agreements. If the trustee is the sole entity authorized to submit requests for disbursements, this needlessly adds cost and delay to the process and provides no greater assurance of the availability of funds for decommissioning. The NRC should give licensees the

option of being the party that submits the disbursement requests and that transmits payments to decommissioning contractors.

Response:

The Commission is not advocating uniform agreements and is only seeking provisions that enhance public health and safety. Further, as indicated above, the Commission will allow disbursement requests to be submitted by a licensee.

Comment:

In order to facilitate license transfers, the NRC should clarify that its regulation will have no effect on the allocation of rights, obligations, or liabilities established by contract or directly applicable orders. If uniform trust agreement provisions were required, they may create an unintended impediment to plant transfers in the future. The rule should state that the regulation would not affect in any manner the rights, obligations, and liabilities of the parties involved in the sale of a nuclear power plant ownership interest.

Response:

The Commission agrees with the first comment that the “regulation will have no effect on the allocation of rights, obligations, or liabilities established by contract or directly applicable orders.” With regard to uniform trust provisions, the NRC is not requiring uniform trust provisions except in specified areas, so the point is moot. Finally, the Commission disagrees with the last statement that “the regulation would not affect in any manner the rights, obligations, and liabilities of the parties involved in the sale of a nuclear power plant ownership interest.” As stated earlier, the NRC is not mandating uniform trusts but will require certain provisions to protect public health and safety.

Comment:

The NRC should convene a public technical conference to explore issues relating to the proposed regulation. Also, the NRC should gather more information and issue a revised notice of proposed rulemaking before proceeding.

Response:

The NRC believes the final rule, which is not applicable to licensees still under State or FERC regulation, except as noted for the reporting requirement, clears much of the confusion apparently caused by the proposed rule. Therefore, the Commission does not believe a conference or the collection of additional information is necessary.

Comment:

One commenter suggested that the NRC should provide guidance as to what its expectations are with respect to arbitration provisions often contained in trust agreements governing disputes between a trustee and grantor.

Response:

The NRC has no position on arbitration provisions contained in trust agreements because those provisions are beyond the NRC's legal authority.

Comment:

The NRC should provide a list of the public and private companies that own or operate power reactors within the meaning of the rule.

Response:

A complete list of licensees/owners of nuclear power plants may be found in "Owners of Nuclear Power Plants," NUREG/CR-6500, Rev. 2, (March 2002). The NRC intends to revise this publication approximately every 2 years.

Comment:

One commenter stated that the rule should be revised to eliminate the unnecessary requirement for power reactor licensees that maintain an NRC-approved, site-specific decommissioning cost estimate and funding plan to also meet the minimum certification amount under 10 CFR 50.75(c). The rule should be revised to specify that for power reactor licensees that maintain NRC-approved site-specific decommissioning cost estimates and funding plans, the requirements of 10 CFR 50.75(c) do not apply. If such a rule revision is not made, then the subject statement in DG-1106 should be reworded or eliminated.

Response:

The commenter is incorrect in indicating the rule should be revised. The Commission's position remains that the site-specific estimates may be used as a basis for a funding plan if the amount to be provided is ". . . at least equal to that stated in paragraph (c)(2) of . . ." (§50.75). The Commission does not intend to allow use of site-specific amounts lower than the formula values. The subject statement in DG-1106 has been addressed.

Comment:

The NRC should consider conforming changes to 10 CFR 72.30, "Financial assurance and recordkeeping for decommissioning." 10 CFR 72.30(c) and (d) apply to Part 50 power plant licensees who store spent fuel in an Independent Spent Fuel Storage Installation under either a Part 72 specific license or a general license. Compliance between Parts 50 and 72 would be beneficial to both the NRC for enforcement purposes and licensees for compliance purposes.

Response:

For the sake of consistency, 10 CFR 72.30(c)(5) is being modified to reflect the suggested compliance.

Comment:

The commenter urged the NRC to continue to recognize the separate and cooperative roles State commissions and the NRC play in regulating nuclear utilities and to work with States on developing mechanisms to protect decommissioning funds.

Response:

The NRC agrees with the comment. The rule will not be applicable to those licensees under State or FERC rate regulation, except as noted for the reporting requirement. Further, the NRC continues to work with the States through regular periodic contact with State regulatory authorities. Lastly, as the following comment indicates, the NRC believes that the rule continues to give State commissions the flexibility that they need to ensure the adequacy of decommissioning funds while protecting consumers within their jurisdiction.

Comment:

A commenter stated that in specifying “that the trust should be an external trust fund in the United States, established pursuant to a written agreement and with an entity that is a State or Federal government agency or an entity whose operations are regulated by a State or Federal agency” the proposed rule continues to give State commissions the flexibility that they need to ensure the adequacy of decommissioning funds while protecting consumers within their jurisdiction.

Response:

The NRC agrees with the comment.

Comment:

The NRC should be careful to assure that State commission authority to achieve these goals is not inadvertently undermined. As proposed, the NRC’s rulemaking appears to provide

enough standardization to achieve the goal of ensuring the security of decommissioning funds while allowing enough generality to achieve the goal of maximizing after-tax yields.

Response:

The Commission agrees with the comment. As indicated throughout this document, the NRC will not impose this rule on licensees remaining under State regulation, except as noted for the reporting requirement.

Comment:

The NRC should clarify that nothing in its final rule will preempt any State authority from reviewing the transfer of a nuclear facility's assets out of rate base and the impact on ratepayers.

Response:

The NRC will not do anything in this rule to preempt any State authority from reviewing the transfer of a nuclear facility's assets out of rate base and the impact on ratepayers. This is also consistent with the response to the preceding comment.

Comment:

An investment management firm claimed the proposed rule would "unfairly damage" their business and also deprive nuclear power plant owners of "a significant investment area for diversification of nuclear decommissioning trust funds."

Response:

The Commission believes the 10-percent *de minimis* limit on nuclear sector investments adequately addresses this concern.

Comment:

Finally, several commenters stated that modifications should be made to the Draft Regulatory Guide to make it consistent with the changes made to the final rule.

Response:

The Regulatory Guide has been modified to reflect the changes made to the final rule.

6. Comments on the draft regulatory guide

Comments were also received on the draft regulatory guide DG-1106. The comments were grouped by section and responded to by the NRC.

I. Comments on Section 1

Comment:

Section 1.1 should be modified to provide guidance for applying existing rules to potential new reactor designs that are not covered by the existing 10 CFR 50.75(c).

Response:

The generic formulas can not apply if licensee is not a boiling water reactor or a pressurized water reactor, so any potential new reactor designs must be site specific. The guidance will be modified to highlight this fact.

Comment:

Section 1.1.1 should recognize that the certification amounts in 10 CFR 50.75 are specific for BWRs and PWRs. Other reactor licensees need to certify they will have adequate funds for decommissioning; however, an exemption is not needed if the amount differs from the BWR and PWR specified formulas. This comment also applies to Section 2.6.1.

Response:

As noted above, site-specific estimates would need to be developed.

Comment:

The last sentence of Section 1.1.2 should read “The level of detail necessary to support the cost estimate is discussed in Regulatory Position 1.3.”

Response:

This change has been made.

Comment:

The NRC’s discussion of Test 4 describes that licensees “generally” prepare annual reports, etc., and does not specifically list annual calculation of the estimated cost as required by 10 CFR 50.75(b)(2). Further, the Test 4 description specifies that “...these reports can be supplied to the NRC upon request...” This availability upon request and the biennial reporting appears sufficient. The Test 4 discussion should justify removing DG Sections 2.2.8 and 1.2 or an explanation of the benefit of annual adjustments to the calculation versus the biennial frequency of the funding status should be provided.

Response:

Section 50.75(f)(1) states that “Each power reactor licensee shall report, on a calendar-year basis, to the NRC by March 31, 1999, and at least once every 2 years thereafter on the status of its decommissioning funding for each reactor or part of a reactor that it owns.” Further, the NRC regulations (10 CFR 50.75(c)) provide the tables for the minimum amounts for reasonable decommissioning financial assurance for PWRs and BWRs. Therefore, the Commission sees no need for removing Sections 1.2 and 2.2.8 of the regulatory guide (which refer to these parts) as the commenter requested. The Commission believes that the required biennial reports, along with the

right to request more frequent reports because of certain circumstances to protect the public health and safety are the best vehicles to provide this necessary information.

Comment:

The second and third paragraphs of Section 1.2 are confusing.

Response:

The NRC believes that the comment and response immediately following adequately address this issue and clarify this Section.

Comment:

In Section 1.2, the reader should be referred to the guidance provided in the most current revision of NUREG-1307 and then expressly state that the example given in the text is an example of a calculation for a specific year only. As written, there may be conflicting guidance between the NUREG and the Regulatory Guide in future years if each is not revised at the same time.

Response:

This change has been made.

Comment:

The last sentence of the last paragraph in Section 1.2 should be separated into a new paragraph because it applies to more than non-electric utility applicants and licensees.

Response:

This change has been made.

Comment:

The last paragraph in Section 1.2 should refer to Regulatory Position 1.4, not 1.5.

Response:

This change has been made.

Comment:

Section 1.3 also should be modified to provide guidance for applying existing rules to potential new reactor designs that are not covered by the existing 10 CFR 50.75(c). The section needs to be further modified to clarify that licensees may provide for the funding of spent fuel management and non-radiological decommissioning costs.

Response:

As noted above, any new reactor design application will need to contain site specific decommissioning cost estimates. In the responses to comments on the proposed rule, the Commission has indicated that licensees may provide for the funding of non-radiological decommissioning costs, that are not under the Commission's legal authority. Also, as indicated in those responses, 10 CFR 50.54(bb) addresses the funding of spent fuel management.

Comment:

The commenter does not see a need for DG-1085, the draft regulatory guide discussing cost estimates, to be referenced in Section 1.3.

Response:

The Commission sees nothing wrong in providing information on resources that will be available to assist licensees in this area.

Comment:

Regulatory position 1.4.1 of DG-1106, states that "For licensees using site-specific cost estimates (i.e., research and test reactor licensees, power reactor licensees not covered by 10 CFR 50.75(c), or . . .)" The commenter stated that it is not clear what is meant by "power reactor licensees not covered by 10 CFR 50.75(c)," since even licensees who are maintaining site-specific cost estimates are required to meet the minimum certification amount specified in

10 CFR 50.75(c). The commenter strongly supported this statement provided it accompanies an associated revision to the rule to eliminate the unnecessary requirement for power reactor licensees that maintain an NRC-approved, site-specific decommissioning cost estimate and funding plan to also meet the minimum certification amount in 10 CFR 50.75(c). The rule should be revised to specify that for power reactor licensees that maintain NRC-approved, site-specific decommissioning cost estimates and funding plans, the requirements of 10 CFR 50.75(c) do not apply. If such a rule revision is not made, then the subject statement in DG-1106 should be reworded or eliminated.

Response:

Licensees not covered by 10 CFR 50.75(c) would include non-PWR and non-BWR reactor designs or those undergoing decommissioning under §50.82. With regard to the commenter's second comment requesting the elimination of the minimum certification amount in 10 CFR 50.75(c), the Commission has previously considered and rejected the option of allowing licensees to use site-specific estimates less than the minimum amounts. Licensees continue to have the option of submitting an exemption request to the Commission for a lower amount.

Comment:

Two commenters noted that the last sentence of Regulatory Position 1.4.3 should be revised to replace the reference to "Regulatory Position 2.2.5." to "Regulatory Position 2.1.5."

Response:

This change has been made.

Comment:

Regulatory Position 1.5, which is referenced in several places of the draft regulatory guide, does not exist. It is not clear if Regulatory Position 1.2, 1.4, 2.2.8 or some other section was the intended reference.

Response:

The intended reference is Regulatory Position 1.4 and this change has been made.

II. Comments on Section 2

Comment:

In Section 2.1.5, the reference to "Regulatory Position 1.5" should read 1.4.

Response:

This change has been made.

Comment:

The last sentence in Section 2.1.5 should have "as needed" added to it.

Response:

This change has been made.

Comment:

The annual adjustment frequency in Section 2.1.5 for licensees that are no longer rate regulated or do not have access to a non-bypassable charge is too frequent. Short-term market fluctuations could lead to more frequent adjustments than truly necessary and result in greater administrative costs. Because, decommissioning is normally a long-term investment, frequent changes could lead to losses and increased investment costs. Although the fund's adequacy should be evaluated annually, annual adjustments may not be prudent.

Response:

The last sentence of Section 2.1.5 has been revised to indicate that adjustments, as needed, to the amount of funds set aside should be made at least once every 2 years, in conjunction with the biennial reporting requirement by licensees that are no longer rate-regulated or do not have access to a non-bypassable charge. Licensees who remain rate regulated should make these adjustments at least every 6 years, in conjunction with rate cases.

Comment:

Regulatory Position 2.2.1 of DG-1106 should be revised to “An applicant or licensee using an escrow account, certificate of deposit, or trust agreement . . . may use the sample wording for these methods contained in Appendices B.1, B.2, and B.3, respectively.” This change is consistent with similar wording in Regulatory Position 2.3.1 of DG-1106.

Response:

This change has been made.

Comment:

The funding mechanism will not ensure that adequate information concerning funds is provided to the NRC. It is the licensee’s responsibility to do so under the rule. Even the sample instruments in the appendices do not include NRC reporting requirements, nor should they (Section 2.2.1). Also, Section 2.2.2.5 should be revised to delete “terms relating to the provision of information to the NRC” from the description of key provisions of a trust.

Response:

The Commission has deleted what was item (e), “it will ensure that adequate information concerning the funds is provided to NRC,” from Draft Regulatory Guide Section 2.2.1. Also, the words “key terms relating to the provision of information to NRC” has been deleted from Section 2.2.2.5 of the Draft Regulatory Guide.

Comment:

Replace the word “indicia” in Section 2.2.1 with another word.

Response:

The word “indicia” was replaced with the word “indicators.”

Comment:

The methods listed in Section 2.2.1 should be identified in the same order as they are listed in the appendices (i.e., the escrow account should be listed first because it is B-1, and the trust agreement should be listed last because it is B-3.)

Response:

This change has been made for the sake of consistency.

Comment:

The first sentence of Section 2.2.1 references Appendices B.1, B.2, and B.3. The appendices are labeled as B-1, B-2, and B-3. The titles should be consistent.

Response:

This change has been made.

Comment:

Section 2.2.2.1 should not indicate the need for identification of a license number and NRC docket number. This minor change would reduce the burden of nuclear decommissioning trust agreement amendments necessary to conform to the new NRC rule and guidance.

Response:

The words "by license or NRC docket number" were deleted from the draft regulatory guide. As long as licensees use a plant name or other specific identifier, no specific use of docket or license number is necessary.

Comment:

Section 2.2.2.2 should have reference to Section 468A eliminated because it is unnecessary. Also, the section should have an addition to indicate that there are existing nuclear decommissioning trust agreements that govern multiple trusts for multiple licensed facilities, an existing practice acceptable to the NRC.

Response:

The second and last sentences at Section 2.2.2.2 have been modified to now read: “A single trust agreement may establish two or more Nuclear Decommissioning Funds when a nuclear power plant is owned by two or more licensees. Similarly, a trust agreement may contain both ‘qualified’ and ‘non-qualified’ decommissioning funds pursuant to Internal Revenue Code 468A.” Trusts should be segregated by sub-accounts or some other means to clearly identify NRC-defined decommissioning costs for each unit.

Comment:

Several commenters suggested a reconciliation of a 30-day notice for disbursements with DG-1106. They stated that the rule does not provide for the notice exception contained in the draft regulatory guide Section 2.2.2.4 and that no NRC notification should be required for any expenditure specifically permitted under any of the provisions of 10 CFR 50.82(a)(8), i.e., the exception from notice requirements should include not only 10 CFR 50.82(a)(8)(i), but also 10 CFR 50.82(a)(8)(ii). Lastly, Section 2.2.2.4 should be revised to specifically describe the acceptable forms that a written notice of intent may take to begin expending funds for such purpose. Acceptable forms should include an NRC approval of a site-specific decommissioning cost estimate and funding plan that includes activity costs and schedules related to spent fuel management and non-radiological decommissioning.

Response:

These comments are all addressed by the fact that decommissioning trust requirements of the final rule do not apply to licensees that are in decommissioning and thus subject to Part 50.82(a)(8). The regulatory guide was modified to address the comment.

Comment:

The last sentence of Regulatory Position 2.2.2.5 does not contribute to the intent of this revision to the Regulatory Guide to provide more detailed guidance to assist in implementing the changes in the NRC's regulations. Some examples and/or characteristics of changes to trust agreements that would not be considered "material" would be of more assistance to licensees wishing to implement the new rule.

Response:

As previously mentioned, in response to comments received on modifications to trusts, the NRC defines "material" modifications to include actions such as change of trustee, change of provisions relating to withdrawals from the trust, changes relating to the beneficiary, changes relating to the duration or term of the trust, or other changes potentially affecting the ability of the trust agreement to provide reasonable assurance of decommissioning funds. Modifications that are not material would include, for example, changes in fee structures paid to a trustee, changes in arbitration provisions between the trustee and the licensee, changes in investment advisor, if applicable, or investments, provided the changes comply with other aspects of this rule.

Comment:

One commenter suggested that Section 2.2.3 be modified to reflect their comments relating to dual regulation regarding investment standards, re-phrasing the limitations on licensee involvement in investment decisions, and clarification regarding non-nuclear sector collective or commingled funds and pre-existing investments. Another revision in the section is suggested to conform the guidance to the explicit terms of proposed 10 CFR 50.75(h)(1)(i)(A).

Response:

The Commission considers the proposed revision consistent with its position on dual regulation. The revision clarifies the Commission's intent and the change has been made.

Comment:

This commenter referred only to paragraph C.2.2.3.3 of Draft Regulatory Guide DG-1106. The commenter urged NRC to drop its prohibition of trust agreements investing “in securities of other power reactor licensees or any entity owning or operating one or more nuclear power plants” and suggested that the direct investment be limited “to 10% or less of trust assets.” The commenter also claimed that the proposed rule would “unfairly damage” their business and also deprive nuclear power plant owners of “a significant investment area for diversification of nuclear decommissioning trust funds.”

Response:

The final rule has been modified to allow licensees to own securities of other nuclear power plants, but to limit them to 10 percent or less of trust assets. As a result, Section 2.2.3.3 of the revised regulatory guide has also been modified.

Comment:

A commenter proposed that the Commission delete Section 2.2.3.5 which recommends that those licensees not under FERC or PUC jurisdiction limit investments to “investment grade,” as defined in that section. The commenter noted that use of the generally accepted term “prudent investor” standard, as defined by FERC negates the need for the NRC to make use of the term “investment grade.”

Response:

The Commission has modified the rule and the guidance so that only the term “prudent investor” standard is used. Section 2.2.3.5 has been deleted.

Comment:

A commenter proposed that the NRC revise Section 2.2.8 to clarify how licensees may take credit for earnings during the decommissioning period. This is problematic for licensees that operate multiple, modular reactors at a single site.

Response:

With respect to the modular reactors, the assumptions of earnings credit should track the estimated cash flows for decommissioning expenses for each module.

Comment:

A few commenters noted that the draft regulatory guide contains guidance that is inconsistent with the rule. The 2-percent rate of return credit beyond the period of operation into the safe-storage period is not allowed in Section 2.2.8 of the regulatory guide, but allowed in proposed 10 CFR 50.75(e)(1)(i) and (ii). There are also inconsistencies with the handling of credit for periods of final dismantlement and license termination.

Response:

As noted in response to a similar comment on the rule, the 2-percent credit can only be used for the period up to shutdown if the amount is based on the formulas in §50.75(c). If the amount is based on a site-specific study that explicitly includes SAFSTOR, the licensee can then take the 2-percent credit into the storage period.

Comment:

In Section 2.3.1, the first sentence references Appendices B.4, B.5, and B.6. The appendices are labeled as B-4, B-5, and B-6. The titles should be consistent.

Response:

This change has been made.

Comment:

The third bullet in Section 2.3.2 is confusing.

Response:

The bulleted item has been modified to read “For insurance, an original or conformed copy of the insurance policy.”

Comment:

The appendix in Section 2.4.2 is incorrectly identified in this section. The appendix referred to should be B-3.2.

Response:

This change has been made.

Comment:

The regulatory position referred to in Section 2.4.3 should be 2.2.5, not 2.2.2.

Response:

This change has been made.

Comment:

In Section 2.6.1, the information which the report must include incorrectly states that “any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(ii)(C).” The commenter believed that 10 CFR 50.75(e)(1)(v) is the more appropriate reference. Further, the commenter suggested that this appears to be an ideal location to reiterate the guidance provided in Regulatory Issue Summary (RIS) 2001-07 for the biennial reports.

Response:

The commenter is correct in noting that 10 CFR 50.75(e)(1)(v) is the more appropriate reference in this section and the change has been made. Reference to RIS 2001-07 was also added to Section 2.6.1.

Comment:

The content of the periodic report on decommissioning funding as described in Section 2.6.2 appears excessive. If more detailed information is desired for a specific trust, the information can be looked at on a case-by-case basis.

Response:

The second sentence of Section 2.6.2 has been modified to read “. . . although it would be helpful if they indicate broad categories of investments as a percent of the total trust portfolio . . .”

Comment:

The next to the last sentence in Section 2.6.2 should read “. . . as provided in 10 CFR 50.75(e)(1)(i) or (ii).”

Response:

This change has been made.

Comment:

Regulatory Position 2.7 is redundant and would be more pertinent and focused if it were replaced with “In 10 CFR 50.82(a)(9), submittal of a license termination plan is required at the time a licensee applies for termination of license. The license termination plan must include an updated site-specific estimate of remaining decommissioning costs, as described in detail in NUREG-1700, ‘Standard Review Plan for Evaluating Nuclear Plant Reactor License Termination Plans,’ and RG 1.179, ‘Standard Format and Content of License Termination Plans for Nuclear Power Reactors.’”

Response:

The point raised by the commenter is valid and the change has been made.

III. Comments on the Appendices

Comment:

The definitions of “qualified decommissioning funds” and “non-qualified decommissioning funds” should be added to the glossary of financial terms provided in DG-1106, Appendix A.

Response:

The NRC uses the terms in reference to Section 468A of the Internal Revenue Code. A footnote has been added to Section 2.1.5 to clarify this reference.

Comment:

The methods of financial assurance contained in DG-1106, Appendix B appear to contradict the requirements and allowances in 10 CFR 50.75(e).

Response:

Appendix B was modified to note that the examples provided in the appendix are for some of the mechanisms allowed in NRC regulations.

Comment:

Appendix B-1, paragraph 4 should include that remaining funds should be returned to the licensee or other specified party upon receipt of documentation of license termination.

Response:

This requested change was not made. Although the Commission has no objection to those words being contained in a trust fund provision it is beyond NRC's jurisdiction.

Comment:

Section 5 of Appendix B-3 "Sample Trust Fund" should be revised to reflect the obligations imposed by proposed 10 CFR 50.75(h)(1)(ii) and a commenter's proposed 10 CFR 50.75(h)(1)(iii).

Response:

This comment reflects the Commission's position that withdrawals made under §50.82(a)(8) will not be subject to the 30-working day notification requirement. Section 5 of Appendix B-3 was revised.

Comment:

Section 6 of Appendix B-3 “Sample Trust Fund” should be revised to reflect a commenter’s statement regarding non-nuclear sector collective or commingled funds and pre-existing investments. Section 6(b) should be deleted because it is an issue that should be addressed in negotiations between the licensees and trustees. Other changes are also proposed to account for a commenter’s proposed dual regulation regarding investment standards, the proposed 10 CFR 50.75(h)(1)(i)(D), and the proposed modification on the limitations on licensee involvement in investment decisions.

Response:

Section 6 has been modified to reflect the Commission’s clarification on non-nuclear sector collective or commingled funds and pre-existing investments. Section 6(b) has not been modified because this language has been included only as part of a sample of a trust agreement and does not reflect any NRC requirement that this language be included. Other modifications have been made to reflect the Commission’s position on dual regulation, day-to-day investment decisions and licensee involvement in investment decisions.

Comment:

Section 8 of Appendix B-3 “Sample Trust Fund” subsections should be renumbered to correct a typographical error.

Response:

This change has been made.

Comment:

Section 15 of Appendix B-3 “Sample Trust Fund” should be modified to reflect the requirements of the proposed 10 CFR 50.75(h)(1)(ii).

Response:

This section has been modified to reflect the 30-working day notification of amendments to the trust agreement.

Comment:

Appendices B.3.2.2 and B.3.3 should be changed to B-3.2.2 and B-3.3 to be consistent with titles of other appendices.

Response:

These changes have been made.

Comment:

In Appendix B-6.5, Item 9, the 120-day time frame should be changed to 180 days to allow sufficient time for action, because the period also included notification and the NRC's review time. Also, in Item 10, the 30 days should be changed to 90 days to allow sufficient time to prepare, review, and approve an alternative financial assurance mechanism.

Response:

These changes have been made.

IV. Comments referring to no specific section of the regulatory guide.

Comment:

Appropriate changes should be made to Regulatory Guide 1.159 to correspond to the final rule.

Response:

The necessary changes were made.

Comment:

Even though neither insurance nor long term contracts are used by many licensees, it would be useful for the NRC to provide guidance for each as it does for the other methods of financial assurance.

Response:

First, the guide was written to address the standard, most widely used industry financial assurance methods, which includes trust agreement and guarantees but not insurance and long term contracts. Second, long-term contracts and insurance policies are likely to vary so much that it would be difficult to develop sample language that could encompass all uses of these mechanisms. However, the NRC will consider adding sample language for these mechanisms after it has gained more experience with their use by licensees.

Comment:

DG-1106 should include guidance for the application of the self-guarantee as allowed by 10 CFR 50.75(e)(1)(iii)(C).

Response:

When using the self-guarantee mechanism, a licensee needs to pass the financial tests as discussed in 10 CFR Part 30, Appendix C - Criteria Relating to Use of Financial Tests and Self Guarantees for Providing Reasonable Assurance of Funds for Decommissioning.

Comment:

The commenter suggested modifications to DG-1106 to clarify the NRC's guidance for applying the existing rules to potential new reactor designs that are not covered by the current formula amount in 10 CFR 50.75(c).

Response:

As indicated above, new reactor designs will be required to use site-specific decommissioning cost estimates.

Comment:

The guide is inconsistent in the use of recommendations and requirements.

Response:

The NRC staff reviewed the guide and made changes where necessary. Of course, requirements should only be used in reference to being in compliance with regulations and recommendations in reference to approved ways of meeting requirements, often contained in guidance.

Comment:

The notification for disbursements and material changes ought to apply to the licensee, rather than the trustee. The proposed rule would require the licensee to notify the NRC of material changes to the trust, while the guide states the trustee is responsible.

Response:

Sections 2.2.2.4 and 2.2.2.5 of the guide has been changed to indicate that the licensee is responsible for notifying the NRC of material changes to the trust.

Comment:

Estimated tax deductions should be allowed to be assumed to cover taxes on earnings that will be due when investments are sold to meet decommissioning expenses.

Response:

The NRC has a long standing policy of not allowing estimated future tax deductions as part of a means to provide decommissioning funding assurance.

Comment:

The sample agreements in the appendices do not reflect that the rule permits use of funds for decommissioning planning. They would not allow disbursements until decommissioning is in progress. Spending money on planning before starting decommissioning is a prudent use of funds, when possible.

Response:

Spending funds on planning for decommissioning before permanent shutdown is not precluded by this rulemaking and guidance. The NRC will consider clarifying the timing of the use of trust funds for planning in the future.

Comment:

For power reactors, a Post Shutdown Decommissioning Activities Report (PSDAR) is submitted rather than a plan until the License Termination Plan is submitted later in the decommissioning. The sample agreements refer to plans and procedures.

Response:

The guidance has been reviewed to check for consistency. Changes in the words “plans,” “procedures,” and “reports” were made for clarity where necessary.

Comment:

Some of the samples include certification that the licensee is required to commence decommissioning. For most power reactors, the licensee has decided to commence decommissioning rather than being required to do so.

Response:

Changes were made to the sample trust fund agreements to indicate that decommissioning “has commenced,” not that it was “required.”

Comment:

Ongoing activities may give rise to a need for additional work not anticipated at the time of the last “request.” Also, guidance does not appear to exist regarding specificity requirements associated with the required fund use requests. Overly broad requests may defeat the purpose of the rule while more specific requests may exclude emergent work activities for 30 days. The proposed rule and the draft guidance are inconsistent with respect to expectations relative to the new 30-day disbursement requirement.

Response:

The Commission believes that it has addressed this concern by noting that this rule will not be applicable to those licensees in decommissioning under §50.82.

Comment:

One commenter concurred that the trust wording in DG-1106 is not expected to be adopted by the licensees, but believes that the NRC should clarify that directions in the proposed rule that certain trust provisions should be included by power reactor licensees in their trusts does not imply that the general language in the regulatory guide sample trust should be used by power reactor licensees.

Response:

This position has been included in the statement of considerations of the final rule.

The Final Rule

The final rule clarifies the Commission's position that these new requirements are applicable only to those licensees that are no longer regulated by a State Public Utility Commission (PUC) or the Federal Energy Regulatory Commission (FERC), with the exception that all power reactor licensees, both rate regulated and otherwise, will be required to notify the NRC in advance of decommissioning trust withdrawals if these withdrawals are made before permanent cessation of operations. Further, any nuclear power plant that is no longer operating and under § 50.82 requirements is not affected by this rule. Also, this rule makes a conforming change to § 72.30.

Section-by-Section Analysis

Section 50.75(e).

This section is amended by the addition of information to both paragraphs 50.75(e)(1)(i), which describes the prepayment method of financial assurance, and 50.75(e)(1)(ii), which describes the external sinking fund method of financial assurance. The modifications clarify that the trust must be an external trust fund held in the United States, established under a written agreement with an entity that is a State or Federal government agency or whose operations are regulated by a State or

Federal agency. Additional information is also included about a licensee's taking credit for projected earnings on decommissioning funds.

Section 50.75(h).

This is a new section that implements the following conditions applicable to certain power reactor licensees. The trust agreement must prohibit trust investments in securities or other obligations of the reactor owner or its affiliates, successors, or assigns, or in a mutual fund in which at least 50 percent of the fund is invested in securities of a licensee or parent company whose subsidiary is an owner of a foreign or domestic nuclear power plant. The trust agreement must limit investments to no more than 10 percent of their trust assets in any entity owning one or more nuclear power plants. The trust agreement must stipulate that the agreement cannot be amended in any material respect without 30 working-days prior written notice to the NRC, and that no amendment to the trust may be made if the trustee receives written notice of objection from the NRC within that notice period. The trust agreement must stipulate that the trustee, investment advisor, or anyone else directing investments made by the trust should adhere to a "prudent investor" standard. The trust agreement must provide that no disbursements or payments from the trust (other than for payment of routine administrative expenses or for withdrawals being made pursuant to 10 CFR 50.82(a)(8)) may be made by the trustee until the trustee has first given the NRC 30 working-days prior written notice, and that no disbursements or payments from the trust may be made if the trustee receives written notice of objection from the NRC within that notice period. The person directing the investment of the funds may not use the licensee or its affiliates or subsidiaries as the investment manager for the funds or accept day-to-day management direction of the funds' investments or direction on individual investments by the funds, except in the case of passive fund management of trust funds when this management is limited to investments tracking indices.

Section 72.30(c)(5).

This section has been modified to make it consistent with the requirements contained in 10 CFR 50.75(e) and (h).

Availability of Documents

The NRC is making the documents identified below available to interested persons through one or more of the following methods as indicated.

Public Document Room (PDR). The NRC Public Document Room is located at 11555 Rockville Pike, Room O-1 F23, Rockville, Maryland.

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

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

The NRC staff contact (NRC Staff). Brian J. Richter, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone (301) 415-1978; e-mail bjr@nrc.gov.

Document	PDR	Web	PERR	NRC Staff
Comments received	X		X	
Regulatory Analysis	X	X	ML020910259	X
Regulatory Guide, 1.159, Rev. 1	X	X	ML020910282	

A free single copy of Draft Regulatory Guide DG-1106 may be obtained by writing to the Office of the Chief Information Officer, Reproduction and Distribution Services Section, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or E-mail: DISTRIBUTION@nrc.gov, or Facsimile: (301) 415-2289.

Copies of NUREGS may be purchased from The Superintendent of Documents, U.S. Government Printing Office, Mail Stop SSOP, Washington, DC 20302-0001; Internet: bookstore.gpo.gov; (202)512-1800. Copies are also available from the National Technical Information Service, Springfield, VA 22161-0002; www.ntis.gov; 1-800-533-6847 or, locally, (703) 605-6000. Some publications in the NUREG series are posted at NRC's technical document Website www.nrc.gov/NRC/NUREGS/indexnum.html.

Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113, requires that Federal agencies use technical standards developed or adopted by voluntary consensus standards bodies unless using such a standard is inconsistent with applicable law or otherwise impractical. In this final rule, the NRC is amending its regulations relating to decommissioning trust provisions for nuclear power plants. This action does not constitute the establishment of a standard that contains generally applicable requirements.

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 revision to the NRC's regulations provides licensees with a codification of requirements and guidance that will specify more fully the provisions of the decommissioning trust agreements. These changes would not result in any increased impact on the environment from decommissioning activities as analyzed in the Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities

(NUREG-0586, August 1988) and Draft Supplement 1 (NUREG-0586, Draft Supplement 1, October 2001).¹ Therefore, promulgation of this rule would not introduce any impacts on the environment not previously considered by the NRC.

The NRC requested public comments on any environmental justice considerations that may be related to this issue. No comments were received on this issue.

The NRC requested the views of the States on the environmental assessment for this rule. No comments were received from the States on this issue.

Paperwork Reduction Act Statement

This final rule amends information collection requirements that are subject to the Paper Work Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule has been submitted to the Office of Management and Budget for review and approval of the information collection requirements.

The burden to the public for this information collection is estimated to average 6600 to 13,200 hours, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments on any aspect of this information collection, including suggestions for reducing the burden, to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet electronic mail at BJS1@nrc.gov; and to the Desk Officer, Office of Information and Regulatory Affairs NEOB-10202 (3150-0011), Office of Management and Budget, Washington, DC 20503.

¹Copies of NUREG-0586 and Draft Supplement 1 to NUREG-0586 are available for inspection or copying for a fee from the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike, Room O-1 F23, Rockville, Maryland 20555-0001. Copies may be purchased at current rates from the U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20402-9328 (telephone (202) 512-1800); or from the National Technical Information Service (NTIS) by writing NTIS at 5285 Port Royal Road, Springfield, VA 22161.

Public Protection Notification

If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not collect or sponsor, and a person is not required to respond to, the information collection.

Regulatory Analysis

The Commission has prepared a regulatory analysis on this regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The regulatory analysis is available as indicated under the Availability of Documents heading of the Supplementary Information section.

Regulatory Flexibility Analysis

In accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), the Commission certifies that this rule does 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 Regulatory Analysis for the final rule also constitutes the documentation for the evaluation of backfit requirements. No separate backfit analysis has been prepared. As defined in 10 CFR 50.109, the backfit rule applies to

. . . modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility; any of which may result from a new or amended provision in the Commission rules or the imposition of a regulatory staff position

interpreting the Commission rules that is either new or different from a previously applicable staff position. . . .

The amendments to NRC's requirements for decommissioning trust provisions of nuclear power plants require that decommissioning trust agreements be in a form acceptable to the NRC in order to increase assurance that an adequate amount of decommissioning funds will be available for their intended purpose. Also, as nuclear power reactors have been sold, the NRC has stipulated in connection with license transfers that certain terms and conditions be added to decommissioning trusts. These sales may involve transfers of nuclear power reactors from regulated public utilities to firms that are not regulated as public utilities. Because rate regulators may, as a consequence of utility deregulation, cease to exercise direct oversight over decommissioning trusts, the Commission directed the NRC staff to initiate a rulemaking to require that decommissioning trust agreements are in a form acceptable to the NRC.

Although some of the changes to the regulations are reporting requirements that are not covered by the backfit rule, other elements in the changes are considered backfits because they would modify, supplement, or clarify the regulations with respect to: (1) the fact that the NRC will need to exercise greater oversight of decommissioning trust funds as State Public Utility Commissions reduce their oversight as a result of deregulation within the electric power generation industry, and (2) the NRC exercising more oversight of decommissioning trusts in evaluating license transfer applications. The NRC has concluded on the basis of the documented evaluation required by 10 CFR 50.109(a)(4) and set forth in the regulatory analysis, that the new or modified requirements are necessary to ensure that nuclear power reactor licensees provide for adequate protection of the public health and safety in the face of a changing competitive and regulatory environment not envisioned when the reactor decommissioning funding regulations were promulgated, and that the changes to the regulations are in accord with the common defense and

security. Therefore, the NRC has determined to treat this action as an adequate protection backfit under 10 CFR 50.109(a)(4)(ii). Consequently, a backfit analysis is not required and the cost-benefit standards of 10 CFR 50.109(a)(3) do not apply. Further, these changes to the regulations are required to satisfy 10 CFR 50.109(a)(5).

This is not to say that any non-compliance with this rule would place the public health and safety or the common defense and security in immediate jeopardy. Instead, the NRC views these requirements to be necessary to ensure that in the future, at the conclusion of plant operation, adequate funds will be available for decommissioning.

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

10 CFR Part 50

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

10 CFR Part 72

Administrative practice and procedure, Criminal penalties, Manpower training programs, Nuclear materials, Occupational safety and health, Penalties, Radiation protection, Reporting and recordkeeping requirements, Security measures, Spent fuel, and Whistleblowing.

For the reasons set out 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 and Part 72.

PART 50 - DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

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

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

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951, as amended by Pub. L. 102-486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 936, 955, as amended (42 U.S.C. 2131, 2235); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd), and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80 - 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 §50.75, the introductory text of paragraph (e)(1) and paragraphs (e)(1)(i) and (e)(1)(ii) are revised, and a new paragraph (h) is added to read as follows:

§50.75 Reporting and recordkeeping for decommissioning planning.

* * * * *

(e)(1) Financial assurance is to be provided by the following methods.

(i) *Prepayment.* Prepayment is the deposit made preceding the start of operation or the transfer of a license under §50.80 into an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates of cash or liquid assets such

that the amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected. Prepayment may be in the form of a trust, escrow account, or Government fund with payment by, certificate of deposit, deposit of government or other securities or other method acceptable to the NRC. This trust, escrow account, Government fund, or other type of agreement shall be established in writing and maintained at all times in the United States with an entity that is an appropriate State or Federal government agency, or an entity whose operations in which the prepayment deposit is managed are regulated and examined by a Federal or State agency. A licensee that has prepaid funds based on a site-specific estimate under §50.75(b)(1) of this section may take credit for projected earnings on the prepaid decommissioning trust funds, using up to a 2 percent annual real rate of return from the time of future funds' collection through the projected decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate. This includes the periods of safe storage, final dismantlement, and license termination. A licensee that has prepaid funds based on the formulas in §50.75(c) of this section may take credit for projected earnings on the prepaid decommissioning funds using up to 2 percent annual real rate of return up to the time of permanent termination. A licensee may use a credit of greater than 2 percent if the licensee's rate-setting authority has specifically authorized a higher rate. However, licensees certifying only to the formula amounts (i.e., not a site-specific estimate) can take a pro-rata credit during the immediate dismantlement period (i.e., recognizing both cash expenditures and earnings the first 7 years after shutdown). Actual earnings on existing funds may be used to calculate future fund needs.

(ii) *External sinking fund.* An external sinking fund is a fund established and maintained by setting funds aside periodically in an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates in which the total amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of

operations is expected. An external sinking fund may be in the form of a trust, escrow account, or Government fund, with payment by certificate of deposit, deposit of Government or other securities, or other method acceptable to the NRC. This trust, escrow account, Government fund, or other type of agreement shall be established in writing and maintained at all times in the United States with an entity that is an appropriate State or Federal government agency, or an entity whose operations in which the external sinking fund is managed are regulated and examined by a Federal or State agency. A licensee that has collected funds based on a site-specific estimate under §50.75(b)(1) of this section may take credit for projected earnings on the external sinking funds using up to a 2 percent annual real rate of return from the time of future funds' collection through the decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate. This includes the periods of safe storage, final dismantlement, and license termination. A licensee that has collected funds based on the formulas in §50.75(c) of this section may take credit for collected earnings on the prepaid decommissioning funds using up to 2 percent annual real rate of return up to the time of permanent termination. A licensee may use a credit of greater than 2 percent if the licensee's rate-setting authority has specifically authorized a higher rate. However, licensees certifying only to the formula amounts (i.e., not a site-specific estimate) can take a pro-rata credit during the dismantlement period (i.e., recognizing both cash expenditures and earnings the first 7 years after shutdown). Actual earnings on existing funds may be used to calculate future fund needs. A licensee, whose rates for decommissioning costs cover only a portion of these costs, may make use of this method only for the portion of these costs that are collected in one of the manners described in this paragraph, (e)(1)(ii). This method may be used as the exclusive mechanism relied upon for providing financial assurance for decommissioning in the following circumstances:

* * * * *

(h)(1) Licensees that are not “electric utilities” as defined in §50.2 that use prepayment or an external sinking fund to provide financial assurance shall provide in the terms of the arrangements governing the trust, escrow account, or Government fund, used to segregate and manage the funds that--

(i) The trustee, manager, investment advisor, or other person directing investment of the funds:

(A) Is prohibited from investing the funds in securities or other obligations of the licensee or any other owner or operator of the power reactor or their affiliates, subsidiaries, successors or assigns, or in a mutual fund in which at least 50 percent of the fund is invested in the securities of a licensee or parent company whose subsidiary is an owner of a foreign or domestic nuclear power plant. However, the funds may be invested in securities tied to market indices or other non-nuclear sector collective, commingled, or mutual funds, provided that this subsection shall not operate in such a way as to require the sale or transfer either in whole or in part, or other disposition of any such prohibited investment that was made before the publication date of this rule, provided further that these restrictions do not apply to 10 percent or less of their trust assets in securities of any other entity owning one or more nuclear power plants.

(B) Is obligated at all times to adhere to a standard of care set forth in the trust, which either shall be the standard of care, whether in investing or otherwise, required by State or Federal law or one or more State or Federal regulatory agencies with jurisdiction over the trust funds, or, in the absence of any such care, whether in investing or otherwise, that a prudent investor would use in the same circumstances. The term “prudent investor,” shall have the same meaning as set forth in the Federal Energy Regulatory Commission’s “Regulations Governing Nuclear Plant Decommissioning Trust Funds” at 18 CFR 35.32(a)(3), or any successor regulation.

(ii) The licensee, its affiliates, and its subsidiaries are prohibited from being engaged as investment manager for the funds or from giving day-to-day management direction of the funds' investments or direction on individual investments by the funds, except in the case of passive fund management of trust funds where management is limited to investments tracking market indices.

(iii) The trust, escrow account, Government fund, or other account used to segregate and manage the funds may not be amended in any material respect without written notification to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days before the proposed effective date of the amendment. The licensee shall provide the text of the proposed amendment and a statement of the reason for the proposed amendment. The trust, escrow account, Government fund, or other account may not be amended if the person responsible for managing the trust, escrow account, Government fund, or other account receives written notice of objection from the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, within the notice period; and

(iv) Except for withdrawals being made under 10 CFR 50.82(a)(8), no disbursement or payment may be made from the trust, escrow account, Government fund, or other account used to segregate and manage the funds until written notice of the intention to make a disbursement or payment has been given to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days before the date of the intended disbursement or payment. The disbursement or payment from the trust, escrow account, Government fund or other account may be made following the 30-working day notice period if the person responsible for managing the trust, escrow account, Government fund, or other account does not receive written notice of objection from the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, within the notice

period. Disbursements or payments from the trust, escrow account, Government fund, or other account used to segregate and manage the funds, other than for payment of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, are restricted to decommissioning expenses or transfer to another financial assurance method acceptable under paragraph (e) of this section until final decommissioning has been completed. After decommissioning has begun and withdrawals from the decommissioning fund are made under 10 CFR 50.82(a)(8), no further notification need be made to the NRC.

(2) Licensees that are “electric utilities” under §50.2 that use prepayment or an external sinking fund to provide financial assurance shall provide in the terms of the trust, escrow account, Government fund, or other account used to segregate and manage funds that except for withdrawals being made under 10 CFR 50.82(a)(8), no disbursement or payment may be made from the trust, escrow account, Government fund, or other account used to segregate and manage the funds until written notice of the intention to make a disbursement or payment has been given the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days before the date of the intended disbursement or payment. The disbursement or payment from the trust, escrow account, Government fund or other account may be made following the 30-working day notice period if the person responsible for managing the trust, escrow account, Government fund, or other account does not receive written notice of objection from the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, within the notice period. Disbursements or payments from the trust, escrow account, Government fund, or other account used to segregate and manage the funds, other than for payment of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the

operation of the fund, are restricted to decommissioning expenses or transfer to another financial assurance method acceptable under paragraph (e) of this section until final decommissioning has been completed. After decommissioning has begun and withdrawals from the decommissioning fund are made under 10 CFR 50.82(a)(8), no further notification need be made to the NRC.

(3) A licensee that is not an “electric utility” under §50.2 and using a surety method, insurance, or other guarantee method to provide financial assurance shall provide that the trust established for decommissioning costs to which the surety or insurance is payable contains in its terms the requirements in paragraphs (h)(1)(i), (ii), (iii), and (iv) of this section.

(4) Unless otherwise determined by the Commission with regard to a specific application, the Commission has determined that any amendment to the license of a utilization facility that does no more than delete specific license conditions relating to the terms and conditions of decommissioning trust agreements involves “no significant hazards consideration.”

PART 72 - LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

3. The authority citation for Part 72 continues to read as follows:

AUTHORITY: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86-373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, sec. 7902, 106 Stat. 3123 (42 U.S.C. 5851); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332); secs. 131, 132, 133, 135, 137, 141, Pub. L. 97-425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100-203, 101 Stat. 1330-232, 1330-236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97-425, 96 Stat. 2202, 2203, 2204, 2222, 2224 (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and sec. 218(a), 96 Stat. 2252 (42 U.S.C. 10198).

4. In §72.30, paragraph (c)(5) is revised to read as follows:

§72.30 Financial assurance and recordkeeping for decommissioning.

* * * * *

(c) * * *

* * * * *

(5) In the case of licensees who are issued a power reactor license under Part 50 of this chapter, the methods of 10 CFR 50.75(b), (e), and (h), as applicable.

* * * * *

Dated at Rockville, Maryland, this ___ day of _____, 2002.

For the Nuclear Regulatory Commission.

Annette Vietti-Cook,
Secretary of the Commission.

REGULATORY ANALYSIS FOR AMENDING REACTOR DECOMMISSIONING TRUST PROVISIONS

The NRC has determined that it would be necessary to revise the NRC regulations to require that decommissioning trust agreements be in a form acceptable to the NRC in order to increase assurance that an adequate amount of decommissioning funds will be available for their intended purpose. It intends to do this by requiring that the decommissioning trust agreements: (1) ensure that special care is taken to safeguard the trust corpus from investment risks, (2) provide adequate information concerning the trust to the NRC, and (3) provide safeguards against improper payments from the trust.

1. Statement of the Problem and Objective

With the advent of deregulation of the electric generating industry, State rate regulators are no longer overseeing the terms and conditions of licensees' decommissioning trust agreements. As a result, it is necessary for the NRC to take a more active oversight role to ensure that there is no diminution of efficacy of the trust agreements. Further, given the NRC's recent experience with license transfers and the expected receipt of additional transfers in the future, this rulemaking would expedite future transfers by providing regulatory predictability and stability for license transfers.

2. Identification and Preliminary Analysis of Alternative Approaches

In order to address this issue and respond to an August 10, 1999, Staff Requirements Memorandum (SRM), the NRC staff submitted a rulemaking plan to the Commission on December 30, 1999 (SEC-00-0002). The plan identified two rulemaking options. The Commission approved the rulemaking plan and one of the options in an SRM on February 9, 2000. In the SRM, the Commission directed the NRC staff to include any specific trust fund terms and conditions necessary to protect the funds fully in the rule itself, and that sample language for trust agreements consistent with the terms and conditions within the rule may be provided in the regulatory guide. The staff submitted a proposed rule on decommissioning trust provisions (SECY-01-0049) to the Commission on March 23, 2001. The Commission issued a staff requirements memorandum (SRM) on April 20, 2001, approving publication of the proposed rule after some revisions. The proposed rule was published in the *Federal Register* on May 30, 2001 (66 FR 29244). A total of 36 letters were received from 34 commenters. The letters contained approximately 280 comments on the proposed rule and draft regulatory guide. Seventeen of the commenters were licensees, 11 were representatives of utility groups (some of whose members are licensees), 3 were State agencies or commissions, 1 was the National Association of State Regulatory Utility Commissioners (NARUC), and 2 were investment management companies. About half of the comments were unique. The comments were fairly equally divided between the proposed rule and the draft regulatory guide.

3. Estimation and Evaluation of Values and Impacts

With respect to the proposed oversight activities, licensees are already required by NRC regulations to execute decommissioning trusts (if that is the financial assurance option they chose) regardless of whether the trusts are required to be reported to, or regulated by, a rate regulator. The NRC staff estimates that the rulemaking would impose a one-time burden of about 60 to 120

additional hours for each of the 50 assumed non-rate regulated licensees to prepare an initial review of and revisions to its trust agreement to ensure the trust agreement's consistency with the objectives and criteria of the rule and to fully consider the related guidance in revised Regulatory Guide 1.159, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors." When the licensee's trust is consistent with the NRC's revised guidance, less licensee effort would be needed. (Based on a previous NRC staff review of trust agreements, most appear to contain provisions consistent with sample trust terms and conditions contained in current Regulatory Guide 1.159. However, those sample terms and conditions are being updated and expanded to address issues that have arisen as a result of deregulation and increased license transfer activity.) Further, if the new requirements cause a licensee to revise its trust agreement, it must submit a revised report to the NRC on the status of its decommissioning funding, consistent with the requirements contained in 10 CFR 50.75(f)(1). The NRC staff would then need to review the report, which the staff estimates would take approximately 2 to 4 hours per report. Also, if one assumes that 50 licensees (i.e., those that are not rate regulated) would need to review their trust agreements and submit revised reports within the first year of the rule's implementation, the impact on the NRC staff would range from 100 to 200 staff hours.

With respect to license transfers, the NRC is proposing financial assurance conditions it deems necessary in orders approving the transfers. The savings to licensees engaged in license transfers would result from standardized trust agreement language that could be included prior to submission of license transfer applications. The NRC would also benefit from being able to perform reviews of trust agreements based on common regulations and guidance. Reviews of the license transfer trust agreements take a minimum of 40 NRC staff hours and are more likely in the 80- to 100-hour range. For both the trust agreement portion and the license transfer component of the proposed rule, it appears that there will not be a significant increase in burdens on either licensees or the NRC.

In general, it appears that the greatest benefits that would result from this proposed rule are the increased assurance that an adequate amount of decommissioning funds will be available for their intended purpose and the corresponding regulatory efficiency this proposed rule promotes.

The above values and impacts are based on the amendments to 10 CFR Part 50. While 10 CFR Part 72 is also being amended, that is a conforming change and no additional values nor impacts are assumed to accrue as a result of its implementation. The benefit of this is that compliance between Parts 50 and 72 would be beneficial to both the NRC for enforcement purposes and licensees for compliance purposes.

4. Presentation of Results

As we noted above, the impact on a licensee to review and revise its trust agreement to make it consistent with the proposed rule and guidance is assumed to be between 60 to 120 hours. Assuming 50 reactor licensees (i.e., those that are not rate regulated) would need to review and revise their trust agreements to ensure the trust agreements' consistency with the objectives and criteria of the rule and to fully consider the related guidance in revised Regulatory Guide 1.159 results in an industry total impact of between 3,000 to 6,000 hours. (In some cases, a report will cover more than one power reactor owned by the same licensee. In other cases, co-

owners will submit separate responses for their proportionate shares of the same reactor.) At an assumed average hourly rate of \$130, the total industry implementation cost is estimated to range between \$390,000 to \$780,000. The rate for an individual licensee is estimated to be between \$7800 to \$15,600.

Similarly, the initial impact of this proposed action on the NRC is for the NRC to review any new reports that licensees would need to submit based on the revised trust agreement guidance. As noted above, we assumed about 50 of the licensees would need to submit revised reports and the impact on the NRC staff (at 2 to 4 hours per report) would range from 100 to 200 hours or from \$8000 to \$16,000 assuming an hourly rate of \$80.

With respect to license transfers, licensees would save staff time by having explicit NRC requirements and guidance that should assist the licensees in the proper submittal of any transfers and eliminate the need to resubmit revised transfer applications. However, it is unclear as to the number of transfers that will be submitted to the NRC. The impact of improved license transfer guidance on the NRC is a decrease in the amount of staff time needed to approve license transfers. This is estimated to be about a 20 staff-hour reduction or a \$1600 savings to the NRC per transfer (assuming a \$80 hourly rate for NRC staff time). However, it is uncertain as to how many additional license transfers might be received by the NRC for review and approval.

There would be several additional benefits of this proposed rule. The greatest would be the increased assurance that there would not be any diminution of efficacy of the trust agreements and that the decommissioning funds would be available for their intended purpose. Further, by addressing this issue generically, through rulemaking, rather than continuing the current case-by-case approach, it is expected that the burden on the NRC staff would be reduced by several hours for each license transfer the NRC needs to approve. Another beneficial attribute of this proposed action is “regulatory efficiency” resulting from the expeditious handling of future license transfers by providing regulatory predictability and stability for the transfers. Lastly, the conforming change to 10 CFR Part 72 would be beneficial to both the NRC for enforcement purposes and licensees for compliance purposes.

5. Decision Rationale for Selection of the Proposed Action

As discussed above, the additional burdens on a licensee and the NRC are expected to be modest. However, the revised requirements are necessary to ensure that nuclear power reactor licensees provide for adequate protection of the public health and safety in face of a changing competitive and regulatory environment not envisioned when the reactor decommissioning funding regulations were promulgated and that the changes to the regulations are in accord with the common defense and security.

6. Implementation

The NRC staff proposes that any Federal rulemaking take effect one year after publication of the final rule in the Federal Register.



U.S. NUCLEAR REGULATORY COMMISSION

Revision 1
February 2002

REGULATORY GUIDE

OFFICE OF NUCLEAR REGULATORY RESEARCH

PREPUBLICATION

REGULATORY GUIDE 1.159

(Draft was issued as DG-1106)

ASSURING THE AVAILABILITY OF FUNDS FOR DECOMMISSIONING NUCLEAR REACTORS

Regulatory guides are issued to describe and make available to the public such information as methods acceptable to the NRC staff for implementing specific parts of the NRC's regulations, techniques used by the staff in evaluating specific problems or postulated accidents, and data needed by the NRC staff in its review of applications for permits and licenses. Regulatory guides are not substitutes for regulations, and compliance with them is not required. Methods and solutions different from those set out in the guides will be acceptable if they provide a basis for the findings requisite to the issuance or continuance of a permit or license by the Commission.

This guide was issued after consideration of comments received from the public. Comments and suggestions for improvements in these guides are encouraged at all times, and guides will be revised, as appropriate, to accommodate comments and to reflect new information or experience. Written comments may be submitted to the Rules and Directives Branch, ADM, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

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TABLE OF CONTENTS

	<u>Page</u>
A. INTRODUCTION	1
B. DISCUSSION	1
Amount of Funds for Decommissioning	2
Methods of Financial Assurance	4
C. REGULATORY POSITION	5
1. Amount of Funds for Decommissioning	5
1.1 Funding Requirements for the Decommissioning Report/Initial Amounts	5
1.2 Adjustments to Certification Amounts	6
1.3 Decommissioning Cost Estimates	8
1.4 Adjustments to Cost Estimates	9
2. Methods of Financial Assurance	10
2.1 Guidance Applicable to All Methods of Financial Assurance	10
2.2 Prepayment and External Sinking Fund	12
2.3 Guarantee Methods	16
2.4 Standby Trust	17
2.5 Governmental Statement of Intent	17
2.6 Biennial Reports	18
2.7 License Termination Plan	18
2.8 Procedures for Prematurely or Previously Shutdown Reactors	19
D. IMPLEMENTATION	19
REFERENCES	21
APPENDIX A Glossary of Financial Terms	22
APPENDIX B Examples of Financial Assurance Instruments	24
B-1 Example of Escrow Agreement	25
B-1.1 Example of Certificate of Events	31
B-1.2 Example of Certificate of Resolution	32
B-2 Example of Certificates of Deposit	33
B-2.1 Example of Negotiable Certificate of Deposit	33
B-2.2 Example of Nonnegotiable Certificate of Deposit	34
B-3 Example of Trust Fund and Standby Trust Agreements	35
B-3.1 Example of Trust Fund Agreement	35
B-3.2 Example of Standby Trust Agreement	41
B-3.2.1 Example of Certificate of Events	42
B-3.2.2 Example of Certificate of Resolution	43
B-3.3 Example of Acknowledgment	44
B-4 Example of Payment Surety Bond	45
B-5 Example of Irrevocable Standby Letter of Credit	48

B-6	Example of Documents Recommended to Support Corporate Guarantee	50
B-6.1	Example of Letter from Chief Financial Officer	50
B-6.2	Financial Test: Alternative I	51
B-6.3	Financial Test: Alternative II	52
B-6.4	Example of Auditor's Special Report by Certified Public Accountant	53
B-6.4.1	Example of Schedule Reconciling Amounts Contained in CFO's Letter	54
B.6.5	Example of Parent Company Guarantee	55
Value/Impact Statement	59

A. INTRODUCTION

The general requirements for applications for license termination and decommissioning nuclear power, research, and test reactors are contained in 10 CFR Part 50, “Domestic Licensing of Production and Utilization Facilities.” This guide provides guidance to applicants and licensees of nuclear power, research, and test reactors concerning methods acceptable to the NRC staff for complying with requirements in the amended rules regarding the amount of funds for decommissioning. It also provides guidance on the content and form of the financial assurance mechanisms in those rule amendments.

Subsequent to the original publication of this guide, amendments to 10 CFR Part 50 were promulgated, most recently on September 22, 1998 (63 FR 50465). Various amendments modified 10 CFR 50.33(k), 50.75, and 50.82(b), which require operating license applicants and existing licensees to submit information on how reasonable assurance will be provided that funds are available to decommission the facility. Amended 10 CFR 50.75 establishes requirements for indicating how this assurance will be provided, namely the amount of funds that must be provided including updates, the methods to be used for assuring funds, and provisions contained in trust agreements for safeguarding decommissioning funds.

A proposed Revision 1 to Regulatory Guide 1.159 was developed to reflect these changes in the regulations and to include guidance on the recently proposed amendments to 10 CFR 50.75. The proposed Revision 1 was issued for public comment in May 2001 as DG-1106. This Revision 1 of Regulatory Guide 1.159 also provides explanations and definitions, explains certain concepts that are currently ambiguous, and provides examples of revised guarantee language.

As a guidance document, this regulatory guide and its provisions are not designed to be restrictive or to represent binding requirements. The guide presents methods acceptable to the NRC staff for complying with the decommissioning regulations. The NRC staff recognizes that in certain circumstances (e.g., to meet requirements established by Federal or State economic regulatory agencies or to comply with other applicable laws) other approaches may be necessary.

The information collections contained in this regulatory guide are covered by the requirements of 10 CFR Part 50, which were approved by the Office of Management and Budget, approval number 3150-0011. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

B. DISCUSSION

According to 10 CFR 50.2, “Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) Release of the property for unrestricted use and termination of the license; or (2) Release of the property under restricted conditions and termination of the license.” As used in this context, “facility” refers to the contaminated components (or noncontaminated components required to be dismantled to obtain access to contaminated components) of the site, buildings and contents, and equipment associated with all NRC-licensed activities within the scope of 10 CFR 50.75.

There are three primary methods of decommissioning nuclear reactors.

DECON is the method in which the equipment, structures, and portions of a facility and site containing radioactive contaminants are removed or decontaminated to a level that permits the property to be released for use in accordance with the NRC's definition of decommissioning, shortly after cessation of operations.

SAFSTOR is the method in which the nuclear facility is placed and maintained in a condition that allows the nuclear facility to be safely stored and subsequently decontaminated (deferred decontamination) to levels that permit release for use in accordance with the NRC's definition of decommissioning.

ENTOMB is the method in which radioactive contaminants are encased in a structurally long-lived material, such as concrete. The entombed structure is appropriately maintained, and continued surveillance is carried out until the radioactivity decays to a level permitting release of the property in accordance with the NRC's definition of decommissioning.

So that a lack of funds does not result in delays in or improper conduct of decommissioning that may adversely affect public health and safety, the rule amendments on decommissioning require that applicants and licensees provide reasonable assurance that adequate funds for performing decommissioning will be available at the end of operation. To provide this assurance, the rule requires that two factors be considered, namely, the amount of funds needed for decommissioning and the method used to provide financial assurance.

AMOUNT OF FUNDS FOR DECOMMISSIONING

Estimating the correct amount of funds needed for decommissioning is important to prevent funding shortfalls that could adversely affect public health and safety. Requirements for establishing funding amounts for decommissioning are set out in 10 CFR 50.33(k), 50.75, 50.82(a)(4), 50.82(a)(8), and 50.82(a)(9). These include:

- a. An initial certification amount (or, for non-power reactors, a site-specific estimate) established at the operating license stage (for existing licensees, by July 26, 1990). (10 CFR 50.75(b) and 50.75(c)(1))
- b. Adjustments to the certification amount (or site-specific estimate) over the operating life and storage period, if any, of the facility. Specifically, 10 CFR 50.75(b) requires each licensee to annually adjust the initial certification amount by use of the equation in 10 CFR 50.75(c)(2), which provides for escalation factors for labor, energy, and waste burial; in addition, 10 CFR 50.75(f) requires each licensee to submit, about 5 years prior to the projected end of operation, a preliminary decommissioning cost estimate that includes an up-to-date assessment of the major factors that could affect the cost to decommission.
- c. A post-shutdown decommissioning activities report (PSDAR) to be submitted by the licensee to the NRC, with a copy to the affected States. This must be done prior to or

within 2 years following permanent cessation of operations. The PSDAR must include a description of the planned decommissioning activities along with a schedule for their accomplishment, an estimate of expected costs, and a discussion that provides the reasons for concluding that the environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate previously issued environmental impact statements. (10 CFR 50.82(a)(4))

- d. A site-specific decommissioning cost estimate must be submitted to the NRC prior to the licensee using any funds in excess of amounts described in 10 CFR 50.82(a)(8)(ii). Also, such a cost estimate is required to be submitted within 2 years following permanent cessation of operations, if not already submitted. (10 CFR 50.82(a)(8))
- e. A licensee is required by 10 CFR 50.82(a)(9)(ii)(F) to provide “[a]n updated site-specific estimate of remaining decommissioning costs . . .” as part of a license termination plan (LTP). In addition, 10 CFR 50.82(a)(9)(i) requires that a licensee must submit its LTP at least 2 years before the date of termination of the license.

As indicated in 10 CFR 50.75(b), each power reactor applicant and licensee is to provide certification of financial assurance. The specific information noted in b through e above must also be provided at the appropriate time. The certification amounts in 10 CFR 50.75(c)(1) act as threshold review levels. While not necessarily representing the actual cost of decommissioning for specific reactors, these certification amounts provide assurance that licensees are able to demonstrate adequate financial responsibility in that the bulk of the funds necessary for a safe decommissioning are being considered and planned for early in facility life, thus providing adequate assurance that the facility would not become a risk to public health and safety when it is decommissioned. To estimate increases in the cost of decommissioning over the operating life of the facility, 10 CFR 50.75(c)(2) contains a formula to account for inflation that has occurred in the labor, energy, and waste burial components of decommissioning costs.

As indicated in 10 CFR 50.75(d), each non-power reactor applicant and licensee is to submit a cost estimate for decommissioning its facility. For the purposes of this guidance, non-power reactor applicants and licensees are license applicants for or licensees of test and research reactors whose primary purpose is not to produce electricity. This initial cost estimate is not an exact accounting of the actual cost of decommissioning but is intended to provide an approximation of what decommissioning the reactor will cost at the proposed time of decommissioning. This estimate may be based on information from the literature (e.g., generic studies, licensee models, experience). Pacific Northwest Laboratory has made a detailed cost estimate of the conceptual decommissioning for research and test reactors (Ref. 1) that can be used as a basis, for regulatory purposes, for developing estimates of the costs of decommissioning.

Use of the certification approach is a first step in providing reasonable assurance of decommissioning funds. The second step is that, five years prior to the expected end of operations, licensees are required to submit (or for non-power reactors, to update) a preliminary decommissioning cost estimate that includes an up-to-date assessment of the major factors that could affect the cost to decommission and the plans for adjusting levels of funds. In accordance with 10 CFR 50.82(c), for licensees that shut down their reactors prematurely, the collection period for any shortfall of funds will be determined on a case-by-case basis upon application by the licensee,

taking into account the specific financial situation of each licensee. As required by 10 CFR 50.75(f), this estimated amount of decommissioning funds is to be based on a then-current assessment of major factors that could affect decommissioning cost and is to include relevant, up-to-date information. The third step is a licensee evaluation of specific decommissioning provisions close to the commencement of decommissioning. (Pursuant to 10 CFR 50.82(a), licensees must also submit a license termination plan at least 2 years before the expected date of termination of the license.) Together, these steps provide reasonable assurance that the NRC's objective will be met—namely, at the time of permanent end of operations, sufficient funds are available to decommission the reactor in a manner that protects public health and safety.

METHODS OF FINANCIAL ASSURANCE

NRC rules in 10 CFR 50.75 specify the general requirements for methods that are considered acceptable for providing reasonable assurance of the availability of funds for decommissioning nuclear reactors. These methods and how they are evaluated are discussed in detail in the supplementary information to the NRC rulemaking action that established the requirements (“General Requirements for Decommissioning Nuclear Facilities” (53 FR 24018, June 27, 1988; 61 FR 39301, July 29, 1996; and 62 FR 39091, July 21, 1997)); and the action that recently amended the requirements (“Financial Assurance Requirements for Decommissioning Nuclear Power Reactors: Final Rule” (63 FR 50465, September 22, 1998)), in an NRC staff report (Ref. 2), and in the Generic Environmental Impact Statement on Decommissioning Nuclear Facilities (Ref. 3). These documents present a rationale for the acceptability of methods for providing financial assurance. The Supplementary Information accompanying the final decommissioning rule indicates that, although some methods for providing funding assurance now may not be available, they would be allowed in the event that they become available. This guide addresses the more feasible alternatives in greater detail. Licensees are, of course, free to use any acceptable method as it becomes available.

Section 50.75 indicates that the following methods are acceptable for reactors (a glossary of these terms is provided in Appendix A).

- ! **Prepayment** — The deposit preceding the start of operation, or the transfer of a license pursuant to 10 CFR 50.80 into an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, deposit of government securities, or other payment acceptable to the NRC.

- ! **External Sinking Fund** — A fund established and maintained by setting funds aside periodically in an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates in which the total amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected. An external sinking fund may be in the form of a trust, escrow

account, government fund, certificate of deposit, deposit of government securities, or other payment acceptable to the NRC.

- ! **Guarantee Method** — Can be in the form of surety bonds, letters of credit, or insurance; parent company guarantees may be used when a financial test specified in Appendix A to 10 CFR Part 30 is used.
- ! **Statement of Intent** by a government agency, if applicable, indicates that funds for decommissioning will be obtained when necessary.
- ! **Contractual Obligations** — Obligations on the part of a licensee’s customers, the total amount of which over the duration of the contracts will provide the licensee’s total share of uncollected funds to be needed for decommissioning pursuant to 10 CFR 50.75(c), 50.75(f), or 50.82.
- ! **Other Mechanisms** — Refers to any other mechanism, or combination of mechanisms, that provides assurance of decommissioning funding equivalent to that provided by the mechanisms listed above.

NRC guidance on simplifying the preparation, submittal, and review of information on funding methods acceptable for its non-reactor licensees is in NUREG-1727, “NMSS Decommissioning Standard Review Plan” (Ref. 4). This document contains recommended wording for financial assurance instruments. The instruments in NUREG-1727 are included in modified form in this regulatory guide in Appendix B and are referenced in Regulatory Position 2. Because of the more extensive economic regulation faced by power reactor licensees as opposed to materials licensees, the sample wording is provided for illustration and is not necessarily recommended for use by any individual licensee.

C. REGULATORY POSITION

This section describes methods of implementing the general requirements for financial assurance for decommissioning for reactor licensees and applicants who must comply with 10 CFR Part 50.

Regulatory Position 1 provides guidance to applicants and licensees on establishing the amount of funds necessary for decommissioning as required by the regulations. Regulatory Position 2 provides guidance on methods acceptable to the NRC for assuring funds.

1. AMOUNT OF FUNDS FOR DECOMMISSIONING

1.1 Funding Requirements for the Decommissioning Report/Initial Amounts

1.1.1 Power Reactor Applicants and Licensees

For power reactor applicants and licensees, the initial certification amount of funds for decommissioning is based on the equations in 10 CFR 50.75(c)(1) and represents the minimum funding level that applicants and licensees must meet.

At its discretion, a power reactor licensee may submit a certification based either on the formulas provided in 10 CFR 50.75(c)(1) and (2) or, when a higher funding level is desired, on a facility-specific cost estimate that is equal to or greater than that calculated in the formula in 10 CFR 50.75(c)(1) and (2). A facility-specific cost estimate may include non-NRC-required costs, but such costs should be identified. If such a combined submittal is used, licensees should ensure that the NRC-required cost estimate for decommissioning costs as defined in 10 CFR 50.2 is equal to or greater than the amount stated in the formulas in 10 CFR 50.75(c)(1) and (2) as the basis for justifying a higher than minimum funding level. For certification amounts below the amount stated in the formulas in 10 CFR 50.75(c)(1) and (2), licensees must submit an exemption request containing details as outlined in Regulatory Position 1.3.

The purpose of the decommissioning report required under 10 CFR 50.33(k) and described in 10 CFR 50.75(b) and (c) is to provide reasonable assurance that licensees have a viable plan to accumulate funds in the certification amount, adjusted for inflation, by the projected time of permanent cessation of operations. Each licensee should submit a statement indicating the certification amount and inflation adjustment appropriate for its reactor or reactors together with a photocopy or conformed copy of the instrument being used to provide assurance of decommissioning funding. If an external sinking fund is being used, the proposed amount of annual (or more frequent) payments should be provided.

1.1.2 Non-Power Reactor Applicants and Licensees

For non-power-reactor applicants and licensees, the amount of funds is to be based on a cost estimate for decommissioning the facility and submitted to the NRC in a report required by 10 CFR 50.33(k). The cost estimate for decommissioning need not be an exact accounting of the actual cost of decommissioning, but rather an estimate of the costs for decommissioning the reactor. The PNL studies (Ref. 1) may be used by applicants or licensees for initial cost estimates with suitable adjustments to account for the facility-specific differences as discussed in Regulatory Positions 1.4.2 and 1.4.3. The level of detail necessary to support the cost estimate is discussed in Regulatory Position 1.3.

1.2 Adjustments to Certification Amounts

For power reactor applicants and licensees, certification amounts described in Regulatory Position 1.1 are to be adjusted annually based on 10 CFR 50.75(b) and (c)(2) and should be available for NRC inspection, as requested. The adjustment factor in 10 CFR 50.75(c)(2) is $0.65L + 0.13E + 0.22B$, where L, E, and B are escalation factors for labor, energy, and waste burial costs respectively. Although these adjustments are to be made annually, they need not be submitted to the NRC. Reasonably recent editions of the documents cited below should be used.

The following is an example of the calculation of the adjustment factor for labor for the year 2001. The adjustment factor¹ for labor, L, can be obtained from “Monthly Labor Review,” published by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). Specifically, the appropriate regional data from the table (currently Table 24), “Employment Cost Index, Private Nonfarm Workers, by Bargaining Status, Region, and Area Size,” subtitled “Compensation,” should be used. (Reference 5 contains information on obtaining the labor adjustment factors that are available on the World Wide Web.) L should be adjusted from a base value in Table 24 corresponding to the amounts in the decommissioning rule amendments that are in January 1986 dollars. The base values of L using an index value of 100 in June 1981, from the BLS data corresponding to January 1986 are 130.5, 127.7, 125.0, and 130.1 for the Northeast, South, Midwest, and West regions, respectively. However, the 1999 BLS index values are based on an index value of 100 in June 1989. The 2001 base values are 156.3, 154.6, 158.6, and 159.4 for the same respective regions. The respective scaling factors are 1.555, 1.441, 1.409, and 1.449. A value of L may be calculated for each region by multiplying the 2001 value by the scaling factor and then dividing by the reference base 1981 value. For example, the 2001 value of L in the Northeast region is $156.3 \times 1.555 \div 130.5 = 1.862$. This value of L could then be used in the equation in paragraph 50.75(c)(2) of the rule amendments for decommissioning a nuclear power plant located in the Northeast region of the United States.

The adjustment factor for energy, E, can be obtained from the “Producer Price Indexes,” published by the BLS. Specifically, data from the table (currently Table 6) entitled “Producer Price Indexes and Percent Changes for Commodity Groupings and Individual Items” (PPI) should be used. The energy term, E, is made up of two components, namely electric power, P, and fuel oil, F. Hence, E should be obtained from the BLS data by using the following equations: for the reference PWR, $[0.58P + 0.42F]$, and for the reference BWR, $[0.54P + 0.46F]$.² P should be taken from appropriate regional data for industrial power (Commodity code 0543 in Table 6) and F should be taken from data for light fuel oils (Commodity code 0573 in Table 6). These energy adjustment factors can also be obtained from BLS databases made available on the World Wide Web (See Reference 5, Appendix C, for further information). As discussed for L in the preceding paragraph, P and F should be adjusted from a base value in the BLS table corresponding to the amounts, as specified in 10 CFR 50.75(c)(1), that are in January 1986 dollars. The base values of P and F from the BLS data corresponding to January 1986 are 114.2 and 82.0 respectively. No regional BLS data for these PPI commodity codes are currently available. All PPI values are based on a value of 100 for the year 1982 (Base 1982 = 100). Thus, the preliminary value of P for 2001 is $141.7 \div 114.2 = 1.241$ and the preliminary value of F is $83.5 \div 82.0 = 1.018$; therefore the 2001 value of E in this case for the equation in 10 CFR 50.75(c) for the reference PWR is $[0.58 \times 1.241 + 0.42 \times 1.018] = 1.147$.

The escalation factor for waste burial, B, can be taken directly from data on the appropriate waste burial location in Table 2.1 of NUREG-1307, “Report on Waste Burial Charges” (Ref. 5). The base value of B for January 1986 is 1.0. This corresponds to the value used in the calculation of the waste burial cost for decommissioning in 10 CFR 50.75(c) and reflects the base cost for waste burial at the Washington site. For example, the value of B in January 2000 for the Washington burial

¹ The derivation of the adjustment factors is explained in greater detail in Sections 3.1-3.5 of “Report on Waste Burial Charges,” NUREG-1307, Revision 9, September 2000 (Ref. 5). NUREG-1307 is revised periodically, the latest revision should be used.

² These equations are derived from Table 6.3 of NUREG/CR-0130, Addendum 4 (Ref. 6), and Table 5.3 of NUREG/CR-0672, Addendum 3 (Ref. 7), respectively.

site for a PWR is $2.223 \div 1.0 = 2.223$. Similarly, for South Carolina the values for a PWR in January 2000 (Atlantic Compact) is $17.922 \div 1.0$. These values for B could then be used in the equation in 10 CFR 50.75(c)(2).

Because this formula does not provide for estimates of future inflation but only of inflation that has already occurred, licensees should recalculate the certification amount each year using the previous year's data as described in 10 CFR 50.75(c)(2). This recalculation is for certification purposes only and does not affect estimated future inflation that a licensee may calculate to establish amortization or collection schedules for rate-making or other purposes.

Applicants and licensees who have prepared a decommissioning cost estimate should also annually prepare adjustments to the cost estimate, but these adjustments need not be submitted to the NRC staff (see Regulatory Position 1.4).

Updated calculations based on the formulas in 10 CFR 50.75(c) or on site-specific estimates are to be submitted every 2 years as part of the biennial report required in 10 CFR 50.75(f)(1).

1.3 Decommissioning Cost Estimates

Five decommissioning cost estimates are required to be developed and submitted for NRC review:

- Initial estimate that may be calculated according to 10 CFR 50.75(c), or that may be site-specific and at least equal to the decommissioning cost from 10 CFR 50.75(c).
- Preliminary decommissioning cost estimate at or about 5 years before the projected end of operations in accordance with 10 CFR 50.75(f)(2).
- Estimate of expected costs contained in the Post-Shutdown Decommissioning Activities Report (PSDAR) in accordance with 10 CFR 50.82(a)(4)(i).
- Site-specific decommissioning cost estimate within 2 years following permanent cessation of operations in accordance with 10 CFR 50.82(a)(8)(iii).
- Updated site-specific estimate of remaining decommissioning costs contained in the License Termination Plan (LTP) in accordance with 10 CFR 50.82(a)(9)(ii)(F).

Guidance is being developed on providing details on content and format for the reporting of these cost estimates; this guidance was proposed in Draft Regulatory Guide DG-1085, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors" (Ref. 8), in November 2001.

In general, decommissioning cost estimates are provided by major activity and major decommissioning phase or time period. The cost estimate must account for the entire decommissioning work scope, but not for items that are outside the scope of the decommissioning process, such as the maintenance and storage of spent fuel in the spent fuel pool, the design or construction of spent fuel dry storage facilities, or other activities not directly related to the long-

term storage, radiological decontamination and dismantlement (D&D) of the facility, or radiological decontamination of the site. If non-decommissioning cost items are included, these items should be identified separately.

Cost estimates should provide costs for each of the following (or similar) major activities and phases with a level of detail appropriate to the type of cost estimate.

- Major radioactive component removal — Reactor vessel and internals, steam generators, pressurizers, large bore reactor coolant system piping, and other large components that are radioactive to a comparable degree.
- Radiological D&D — Removal of remaining radioactive plant systems, including radiological decontamination.
- Management and support (undistributed costs) — Labor costs of utility support staff and decommissioning contractor staff, energy costs, regulatory costs, small tools, insurance, etc.
- Waste packaging/shipping — Placing waste in packages and shipping to waste vendors or burial site.
- Waste burial or waste vendor — Waste burial charges, including waste vendors' processing fees.
- Contingency — Allowance for unexpected costs.

Cost estimates should also include the assumptions, references, and bases for unit costs used in developing the estimates, as well as a description of how inflation is accounted for in the cost estimate. The cost estimate should be provided in current-year dollars. Escalation of the waste disposition costs are considered separately from the general inflation rate applicable to labor, material, and energy costs. Escalation factors are discussed in Regulatory Position 1.2.

1.4 Adjustments to Cost Estimates

In order to maintain adequate funds until completion of decommissioning, funding provisions should contain procedures for periodic review and adjustment of the initial estimate and subsequent amounts set aside, during both operation and any storage periods, based on the following.

1.4.1 Inflation

The effect of inflation on the estimated cost should be determined. For licensees subject to the certification requirements of 10 CFR 50.75(b), the certification amount should be adjusted annually using the formula in 10 CFR 50.75(c)(2) (see Regulatory Position 1.2). For licensees using site-specific cost estimates (i.e., research and test reactor licensees, power reactor licensees not covered by 10 CFR 50.75(c) or exercising their option to submit a site-specific estimate, or licensees submitting preliminary or proposed decommissioning plans pursuant to 10 CFR 50.75(f) and 50.82(a)), new cost estimate studies should be conducted periodically to determine whether the estimate reflects cost changes from inflation or other factors. In no case, however, should site-specific estimates be lower than the formula amounts in 10 CFR 50.75(c). As an alternative to

performing new site-specific cost estimates, licensees may use standard measures of price indexing such as the annual Consumer Price Index published by the U.S. Department of Labor, Bureau of Labor Statistics, or the inflation factor derived from the Implicit Price Deflator for the Gross National Product as published in the “Survey of Current Business” by the U.S. Department of Commerce or in “Economic Indicators” by the Council of Economic Advisors. The licensee may also use the factors indicated in Regulatory Position 1.2 for escalating the principal components of the cost estimate. Estimates of future inflation should bear a reasonable relationship to recent (i.e., within 10 years) economic performance or other relevant economic conditions and factors. The licensee should document the bases for all estimates of past and future inflation.

1.4.2 Technological and Status Changes

For plant-specific decommissioning cost estimates, the effect of technological changes or changes in plant status (e.g., whether the plant has been shut down for an extended period) on the cost estimate should be determined. This could include reasonably determined recent developments in decontamination, waste processing and disposal, or cutting-equipment and other technology, updated information about the facility conditions such as larger levels of contamination than anticipated, updated waste disposal conditions, updated residual radioactivity limits, and experience gained from actually decommissioning similar facilities.

1.4.3 Frequency of Adjustment

Adjustment to the certification amount and site-specific cost estimates should be made at least once a year for the effects described in Regulatory Position 1.4.1. Adjustment to site-specific cost estimates for the effects described in Regulatory Position 1.4.2 should be made according to the amount of change experienced, as appropriate, but at least once every 5 years. Adjustments to funding levels to account for adjustments to the certification amount or site-specific cost estimates are addressed in Regulatory Position 2.1.5.

2. METHODS OF FINANCIAL ASSURANCE

Methods that are considered acceptable for reactors for assuring the availability of funds for decommissioning are in 10 CFR 50.75. The following sections provide specific guidance to licensees for complying with the various types of methods specified in 10 CFR 50.75.

2.1 Guidance Applicable to All Methods of Financial Assurance

2.1.1 If more than one licensee owns a facility, the method should provide clear indication of the funding provisions made by each licensee or agent acting for a licensee. Multiple licensees may, at their discretion, pool decommissioning funds for a jointly-owned facility or facilities as long as the contribution of each licensee and each facility are separately identifiable within the methods being used. Decommissioning funding plans may be submitted either jointly or separately by co-licensees. However, each licensee should ensure the accuracy of its pro rata share of the total NRC-required amount being certified plus periodic adjustments.

2.1.2 The applicant or licensee should indicate that the method used provides, or will provide at the projected cessation of operations, an amount at least equal to the estimated or

certified decommissioning cost for the facility. If a licensee uses a combination of different methods for assuring decommissioning funds, the combined total of the methods being used should equal the certification amount, plus adjustments projected to be needed. At its discretion, a licensee may use an assurance method to provide funds for the adjusted certification amount plus non-NRC-required decommissioning costs.

2.1.3 The applicant or licensee should provide evidence that the parties signing the financial instrument (for the applicant or licensee) are authorized to represent the organization in the transaction.

2.1.4 The applicant or licensee should provide evidence that the financial instrument is either a conformed copy or photocopy of the original instrument.

2.1.5 Each of the methods of financial assurance should be capable of being adjusted to take into account variations in earnings and adjustments in the amount of funds being set aside for decommissioning both during operation and during storage periods, if any (see Regulatory Position 1.4). Adjustments to the annual amount of funds being set aside may be made to coincide with rate cases considered by a licensee's public utility commission (PUC) or by the Federal Energy Regulatory Commission (FERC). Adjustments also may be made to reflect the schedule of "ruling amounts" established by the Internal Revenue Service under Section 468A of the Internal Revenue Code for a qualified³ Nuclear Decommissioning Reserve Fund. However, the sum of the adjusted ruling amount in a qualified account plus the target amount in a non-qualified account should at least equal the amount indicated in 10 CFR 50.75(c). In every case, needed adjustments to the amount of funds set aside should be made at least once every two years, in conjunction with the biennial report, for licensees who are no longer rate-regulated or do not have access to a non-bypassable charge, and at least once every 6 years for licensees who are rate-regulated (see Regulatory Position 1.4).

2.1.6 The licensee should maintain continuity in the funding method as follows:

2.1.6.1. If the licensee decides to change the funding method during the life of the facility or during the storage period, the licensee should notify the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, of this change at least 30 working days in advance of its effective date. Significant modifications to a funding method should also be submitted to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate, at least 30 working days prior to the proposed effective date of the amendment, providing the text of the amendment and a statement of the reason for the proposed amendment.

2.1.6.2. If ownership or operating responsibility of a facility is transferred, the existing financial assurance method is to be maintained until such transfer is approved by the NRC pursuant to 10 CFR 50.80 and the transfer has been effected. (Sale-leaseback agreements do not require new or amended financial assurance mechanisms unless so provided by such agreements.)

2.1.6.3. An acceptable assurance method is to be maintained until the Part 50 license is terminated.

³ The NRC uses the terms "qualified" and "non-qualified" as defined by the IRS in Section 468A of their Code.

2.2 Prepayment and External Sinking Fund

These funding methods should have the following characteristics.

2.2.1 An applicant or licensee using an escrow account, a certificate of deposit, or a trust agreement to satisfy 10 CFR 50.75(c) may use the examples of these methods in Appendices B-1, B-2, and B-3 of this guide. These sample forms have been provided for general guidance. Specific provisions may not be applicable to particular licensees and may be modified as a licensee's specific situation warrants. NRC expects that all prepayment or external sinking fund mechanisms will, at a minimum, satisfy the following conditions: (a) The instrument will meet the requirements of State law for that instrument, (b) it will provide for the segregation of decommissioning funds from the licensee's other assets, (c) it will ensure that the funds are outside the administrative control of the licensee, (d) it will ensure that special care is taken to safeguard the funds from investment risks, and (e) it will provide safeguards against improper payments from the funds.

The condition stipulated in 10 CFR 50.75(e)(1)(ii) that an external sinking fund be "segregated from licensee assets" is intended to ensure that the integrity of decommissioning funds will be maintained, especially with respect to protection from creditors in a bankruptcy situation and to ensure continuity of funding during license transfers. A case-by-case "reasonableness" standard will be applied to licensee compliance with this provision. Key indicators of segregation include separation of the funds from the other assets of the licensee through a transfer to an independent custodian or manager and separate accounting. The phrase "segregation from licensee assets" does not require that the fund be placed in an entity, such as a grantor trust, that is established as a separate tax-paying entity. Licensees should be aware, however, that such a trust will provide greater protection in bankruptcy than the escrow or certificate of deposit.

2.2.2 The following key provisions should be included in the trust instrument (or, when relevant, in the escrow or government fund agreement) to ensure that it is acceptable to the NRC:

2.2.2.1. The trust agreement should state the purpose of the trust and the nuclear facility must be identified. An acceptable statement of purpose is the statement required for a trust agreement to qualify as a Nuclear Decommissioning Reserve Fund under Section 468A of the Internal Revenue Code. To qualify under Section 468A, the trust agreement should state that the trust is established for the exclusive purpose of providing funds for the decommissioning of one or more nuclear plants.

2.2.2.2. The trust agreement should specify that the trust fund is established for the benefit of the licensee of the facility and/or the NRC. More than one licensee may be identified. A single trust agreement may establish two or more Nuclear Decommissioning Funds when a nuclear power plant is owned by two or more licensees. Similarly, a trust agreement may contain both qualified and non-qualified decommissioning funds according to IRS Section 468A.

2.2.2.3. The trust agreement should specify the obligations of the trustee with respect to investments, as described below under Regulatory Position 2.2.3.

2.2.2.4. The trust agreement should specify the circumstances under which payments will be made from the trust. It must provide that no disbursements or payments may be made from the trust by the trustee, other than for payment of ordinary administrative expenses (examples of ordinary administrative expenses are set out in the Internal Revenue Code Section 468A), until the licensee has first given the NRC 30 working days prior written notice, and that no disbursements or payments from the trust may be made if the licensee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate. After decommissioning has begun and withdrawals from the decommissioning fund are being made pursuant to 10 CFR 50.82(a)(8), no further notification need be made to the NRC. Also, as noted in 10 CFR 50.82(a)(8), 3 percent of the generic amount specified in 10 CFR 50.25 may be used for decommissioning planning. Licensees who have submitted the certification required under 10 CFR 50.82 and commenced 90 days after the NRC received the PSDAR may use an additional 20 percent.

If the trust is a qualified Nuclear Decommissioning Fund under Section 468A, it must provide that the assets in the fund will be used only as authorized by Section 468A and regulations thereunder.

2.2.2.5. The trust agreement must specify that amendments to the trust must be executed in writing, and that the agreement cannot be amended in any material respect without 30 working days prior written notification from the licensee to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate.

The NRC defines “material” modifications to include actions such as change of trustee; change to any key provision of the trust, particularly including the investment provisions; change of the provisions related to withdrawals from the trust; changes related to the beneficiary; changes related to the duration or term of the trust; changes that could affect the ability of the trust agreement to provide reasonable assurance of decommissioning funds; and changes to the terms of providing information to the NRC. Modifications that are not material include, for example, changes in fee structures paid to a trustee; changes in arbitration provisions between the trustee and the licensee; changes in investment advisor, if applicable; and changes in investments, provided the changes comply with other aspects of the regulations.

2.2.3 The trust agreement should specify that the trustee’s obligations with respect to investments include (1) day-to-day management of the trust, guided by general investment instructions that the trustee may receive from the licensee or a licensee’s designated investment manager, (2) the obligation of the trustee to perform trust management under a “prudent investor” standard, and (3) the obligation of the trustee to avoid specifically prohibited investments, as described below.

2.2.3.1. The requirement that the trust should not be under the “administrative control of the licensee” will be met if day-to-day investment decisions are made by the trustee or investment manager and not by the licensee. Licensees may exercise general management oversight of trust fund investments to the extent allowed under State trust law. The NRC staff recognizes that licensees have legitimate interests and responsibilities in ensuring appropriate investment strategies for these funds and monitoring the progress of investments. However, licensees should avoid active

day-to-day management of these funds. In this regard, if a trustee is unable to act as an investment manager, use of a professional investment manager will be necessary.

2.2.3.2. The trust agreement must prohibit investments in securities or other obligations of the licensee or any other owner or operator of the facility as well as their affiliates, subsidiaries, successors, or assigns. An affiliate is any company that controls, is controlled by, or is under common control with the licensee or any other owner or operator of the facility. A subsidiary is any company that is owned or controlled directly or indirectly by the licensee or any other owner or operator of the facility. A successor or assign is a company that has acquired possessory rights to the licensee, the facility, or any other owner or operator of the facility.

2.2.3.3. The trust agreement must limit investments in securities of other power reactor licensees or any entity owning or operating one or more nuclear power plants to 10 percent or less of their trust assets, except for investments tied to market indices or investments in non-nuclear mutual funds.

2.2.3.4. Investments selected with the approval of or guidance from the State Public Utility Commission (PUC) with jurisdiction over the licensee or from the Federal Energy Regulatory Commission (FERC) would be acceptable to the NRC staff.

2.2.4 The escrow account, certificate of deposit, or trust agreement must comply with applicable State law for such instruments.

2.2.5 The financial assurance instrument, signed by individuals authorized to act for the appropriate parties, should be maintained in the licensee's records and be available for inspection until termination of the Part 50 license. If feasible, records or duplicates should be maintained onsite.

2.2.6 The trustee of a fund should be an entity that has the authority to act as a trustee and whose trust operations are regulated or examined by a State or Federal agency or, if a government fund is being used, the appropriate State or Federal government agency. The word "national" in the title of a financial institution signals that the institution is Federally regulated, as do the initials "N.A.," or the words "National Association," or "a national banking association." The "examinations" department of the appropriate district office of the Office of the Comptroller of the Currency can provide information about whether the institution has trust powers. The word "State" in the title of a financial institution signals that the institution is State regulated. The examinations department of the applicable State banking authority can provide information about whether the institution has trust powers. Domestic branches of foreign banks may be either Federally regulated or State regulated. Eligibility of an institution can be checked through the "Trust Institutions Search" database, at <http://www2.fdic.gov/structur/trust/index.html> .

2.2.7 A trust agreement should include a clause in which the trustee accepts the responsibility of trusteeship.

2.2.8. Annual deposits in an external sinking fund, including projected earnings, should attempt to approximate the total amount remaining to be accumulated, divided by the remaining years

of the license, as determined by the initial and updated certification amount specified in 10 CFR 50.75(c)(1) and (2).

Arithmetic precision is not required for fund accumulation rates. If, during the course of collecting funds, a licensee has accumulated significantly greater decommissioning funds than anticipated, it may reduce its remaining contributions commensurately. Likewise, if a licensee is significantly behind in collections, increased contributions should be used to make up the deficit. A reasonable time may be used to make up any deficit, consistent with good-faith efforts to obtain appropriate rate relief. However, licensees should avoid undue reliance upon contributions weighted in constant dollars toward the end of projected facility operating life. Additionally, the NRC staff considers reliance on an estimated tax deduction for decommissioning expenses at the time such expenses are incurred to be a form of internal reserve and thus not allowed under 10 CFR 50.75(e). If sufficient rate relief by a State PUC or FERC is ultimately not obtained, licensee's stockholders will be expected to cover decommissioning costs through reduced return on equity. Projected rates of earnings on an external sinking fund during plant operation should reasonably approximate the historical real rate of earnings (i.e., after inflation) obtained by a given type of investment.

Licensees and license applicants who use either prepayment or an external sinking fund as a method for providing decommissioning funding assurance are allowed to take a 2 percent real rate of return credit (i.e., nominal rate of return less inflation) for future earnings on the decommissioning trust fund. (See 10 CFR 50.75(e)(1)(i) and (ii).) During plant operation, this credit should be taken for the remaining years left on the operating license, such that the amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. That is, during plant operation, the 2 percent credit may not be taken for any period, such as extended safe storage, that goes beyond expected termination of operation as specified in the operating license. If license renewal for a plant has been approved by the NRC, the licensee may use the extended license period as the basis for calculating the remaining amount to be collected.

A licensee who has prepaid funds based on a site-specific estimate pursuant to 10 CFR 50.75(b)(1) of this section may take credit for projected earnings on the prepaid decommissioning trust funds, using up to a 2 percent annual real rate of return from the time of future funds' collection through the projected decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate. This includes the periods of safe storage, final dismantlement, and license termination.

As the cost estimate for decommissioning is adjusted annually pursuant to 10 CFR 50.75(b)(2), the adjusted estimate, less amounts already accumulated and taking into account the 2 percent credit, should form the basis of future collections. Funds already accumulated, plus projected future trust fund contributions, plus future projected earnings at the allowed 2 percent real rate, should be sufficient to pay decommissioning costs at the time termination of operation is expected. A licensee may use a credit of greater than 2 percent if the licensee's rate-setting authority has specifically authorized a higher rate. However, licensees certifying only to the formula amounts (i.e., not a site-specific estimate) can take credit into the dismantlement period (e.g., the first 7 years after shutdown) as long as such credit reflects the expected cash flows of expenditures during the immediate disbursement period. Actual earnings on existing funds may be used to calculate the needs for future funds. However, pursuant to 10 CFR 50.75(f)(2), when a licensee is within 5 years of the projected end of operations and submits its preliminary decommissioning cost estimate, the

licensee may take the 2 percent earnings credit over a storage period, as long as the storage period and its cost implications for total decommissioning cost are specifically addressed in the preliminary decommissioning cost estimate.

Licensees who operate multiple modular reactors at a single site may take credit for earnings in such a manner that the assumptions for earnings credit track the cash flows for decommissioning expenses for each module.

2.3 Guarantee Methods

Guarantee methods include surety bonds, letters of credit, lines of credit, and insurance. Acceptable guarantee methods should have the following characteristics.

2.3.1 An applicant or licensee using a surety bond, letter of credit, or parent guarantee may use the sample wording for these methods contained in Appendices B-4, B-5, and B-6, respectively. These sample forms have been provided for illustrative purposes. Specific provisions may not be applicable to particular licensees and may be modified as a licensee's specific situation warrants. However, each licensee should be sure that the instrument being used conforms to applicable State law.

2.3.2 The following documents should be maintained in the licensee's records and be available for inspection by the NRC:

- ! For surety bonds, an originally signed duplicate or conformed copy of the surety bond signed by individuals authorized to act for the licensee and the surety company.
- ! For letters of credit, an originally signed duplicate or conformed copy of the letter of credit signed by individuals authorized to act for the licensee and the financial institution.
- ! For insurance, an original or conformed copy of the insurance policy.
- ! A standby trust fund to receive funds if the surety, letter of credit, or insurance is drawn upon.

2.3.3 The following should be considered for financial institutions used as guarantors:

- ! For surety bonds: The surety company must be listed by the U.S. Department of the Treasury in the most recent edition of Circular 570 and have a coverage limit sufficient to cover the cost estimates for which assurance is sought. Circular 570 is published annually about July 1 and is updated in the *Federal Register*.
- ! For letters of credit: The issuing institution must be an entity that has the authority to issue a letter of credit and whose letter of credit operations are regulated and examined by a Federal or State agency.
- ! For insurance: The insurance company must be licensed by State regulatory authorities to transact business as an insurer in one or more States.

2.3.4 If lines of credit are used, the applicant or licensee should obtain from the lender a written commitment to provide funds for all decommissioning expenditures required by the rule.

2.4 Standby Trust

2.4.1 Under the decommissioning regulations, a licensee or applicant using a surety bond, letter of credit, line of credit, or insurance must establish a “standby” trust fund to receive funds from the other financial instruments, if necessary. Under this arrangement, if a licensee defaults on decommissioning requirements, the issuer or provider of the instrument (or beneficiary, if appropriate) will draw on the funds held in the instruments listed and deposit them directly into the standby trust for use as required for decommissioning. In addition to the instruments listed, applicants or licensees using parent company guarantees, certificates of deposit, or government securities should establish a standby trust.

2.4.2 An applicant or licensee establishing a standby trust is directed to the sample wording for the instrument contained in Appendix B-3.2.

2.4.3 Appropriate documentation regarding the standby trust should be maintained in the licensee’s records as indicated in Regulatory Position 2.2.5.

2.5 Governmental Statement of Intent

A government licensee or license applicant as designated in 10 CFR 50.75(e) can submit a statement of intent that contains a cost estimate for decommissioning and indicates that funds for decommissioning will be obtained when necessary. Federal licensees are the only government licensees allowed to use a statement of intent for power reactors. As defined in 10 CFR 50.2, a “Federal licensee means any NRC licensee, the obligations of which are guaranteed by and supported by the full faith and credit of the United States Government.” Non-power reactor licensees using a statement of intent may be Federal, State, or local government entities. The statement of intent should contain the following:

- ! Identification of the facility or facilities for which it provides the financial assurance and the corresponding decommissioning costs.
- ! An indication that funds for decommissioning will be requested and obtained sufficiently in advance of decommissioning to prevent delay of required activities.
- ! Evidence of the authority of the official of the government entity to sign the statement of intent and evidence that the licensee’s decommissioning obligation is supported by the full faith and credit of the U.S. Government.

A signed copy of the statement of intent that funds will be obtained when necessary should be maintained in the licensee’s records and be available for inspection.

2.6 Biennial Reports

2.6.1 As provided in 10 CFR 50.75(f)(1), each power reactor licensee is required to report to the NRC on a calendar year basis, beginning on March 31, 1999, and every 2 years thereafter, on the status of its decommissioning funding for each reactor or share of a reactor that it owns. The information in this report must include, at a minimum, the amount of decommissioning funds estimated to be required, pursuant to 10 CFR 50.75(b) and (c), or a site-specific estimate, if greater than the amount in 10 CFR 50.75(c), as appropriate (or for a reactor that is neither a BWR or a PWR); the amount accumulated to the end of the calendar year preceding the date of the report; a schedule of the annual amounts remaining to be collected; the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections; any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v); and any modifications to a licensee's current method of providing financial assurance occurring since the last submitted report, including material modifications to decommissioning trust agreements. This is essentially the same information requested in NRC Regulatory Issue Summary 2001-07 (Ref. 9), February 23, 2001. Any licensee whose plant is within 5 years of the projected end of operation, or when conditions have changed such that it will close within 5 years or has already closed, is required to submit the report annually. Licensees of plants involved in mergers or acquisitions are also required to submit this report annually until the NRC has approved the merger or acquisition pursuant to 10 CFR 50.80. For such licensees, this report may be submitted as part of the licensee's license transfer application, provided that it contains the information described above. The NRC staff interprets this provision to require applicants to revert to an odd-year biennial reporting cycle upon completion of the merger.

2.6.2 As long as the information described above is included in the report, no specific reporting format is required. As part of the report, licensees do not need to submit a complete listing of all investments, although it is helpful to indicate broad categories of investments as a percent of the total trust portfolio (e.g., equities equal 20 percent of the total value of the trust, Federal Government bonds and notes equal 50 percent of the total value of the trust). Additionally, each licensee should indicate the assurance mechanism being used as a source of revenues for the external sinking fund (e.g., traditional "cost-of-service" ratemaking, a non-bypassable charge, long-term contracts that the NRC has found to be acceptable pursuant to 10 CFR 50.75(e)(1)(v)).⁴ If the assumed real earnings rate on an external sinking fund exceeds 2 percent, each licensee should indicate the specific rate ruling or decision by its rate regulator that documents the earnings rate being used, as provided in 10 CFR 50.75(e)(1)(i) or (ii). If a licensee is using an assurance mechanism other than an external sinking fund, it should include adjustments to the assurance mechanisms (e.g., a surety bond or letter of credit) as part of the report to account for any escalation since the previous report.

2.7 License Termination Plan

In 10 CFR 50.82(a)(9), submittal of a license termination plan is required at the time a licensee applies for termination of a license. The license termination plan is to include provisions for funding and an updated site-specific estimate of remaining decommissioning costs as described

⁴ To the extent that power reactor licensees have received rate regulator approval to use market-based rates for a significant portion of their nuclear-related revenues (i.e., greater than 20 percent), the NRC will not consider them to be subject to traditional cost-of-service rate regulation for that portion of their rates.

in detail in NUREG-1700, “Standard Review Plan for Evaluating Nuclear Plant Reactor License Termination Plans” (Ref. 10), and Regulatory Guide 1.179, “Standard Format and Content of License Termination Plans for Nuclear Power Reactors” (Ref. 11).

2.8 Procedures for Prematurely or Previously Shutdown Reactors

The funding requirements of 10 CFR 50.75 and 50.82 apply to all reactors, including those that were shut down prior to the effective date of the final rule (July 27, 1988), because these reactors possess a Part 50 license, albeit modified. As indicated in the Supplementary Information to the final rule, details concerning financial assurance, primarily the time period for accumulating funds not set aside during operation, would be decided on a case-by-case basis. In a final rule published July 9, 1992 (57 FR 30383), this case-by-case approach was extended to licensees of all power reactors that shut down prematurely. Each licensee should provide:

2.8.1 Information on how reasonable assurance will be provided that funds will be available to decommission the facility.

2.8.2 Information on the amount of funds for decommissioning as required by 10 CFR 50.75(f). That is, a cost estimate that includes provisions for adjusting the estimate should be submitted based on Regulatory Position 1.

2.8.3 Information on the method of financial assurance to be used as required by 10 CFR 50.75(e). That is, funds needed to complete decommissioning are to be placed in an account segregated from licensee assets and outside the licensee’s administrative control, or a surety method or fund statement of intent should be maintained based on Regulatory Position 2.

D. IMPLEMENTATION

The purpose of this section is to provide information to applicants and licensees regarding the NRC staff’s plans for using this regulatory guide.

Except when an applicant or licensee proposes an acceptable alternative method for complying with the specified portions of the NRC’s regulations, the methods described in this guide reflecting public comments will be used to evaluate compliance with the requirements of 10 CFR 50.33(k), 50.75, and 50.82 applicable to all plants that have an operating license in effect on July 27, 1990, or later, and all plants for which an application for an operating license is submitted or under NRC review after July 27, 1988, which is the effective date of the final decommissioning rule (53 FR 24018, June 27, 1988).

REFERENCES

1. G.J. Konzek, "Technology, Safety, and Costs of Decommissioning Reference Nuclear Research and Test Reactors" (prepared by Pacific Northwest Laboratory for the U.S. Nuclear Regulatory Commission), NUREG/CR-1756, March 1982, and Addendum 1, July 1983.¹
2. Robert S. Wood, "Assuring the Availability of Funds for Decommissioning Nuclear Facilities," U.S. Nuclear Regulatory Commission, Draft Report, NUREG-0584, Rev. 3, March 1983.²
3. U.S. Nuclear Regulatory Commission, "Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities," NUREG-0586, August 1988.¹
4. U.S. Nuclear Regulatory Commission, "NMSS Decommissioning Standard Review Plan," NUREG-1727, September 2000.¹
5. U.S. Nuclear Regulatory Commission, "Report on Waste Burial Charges," NUREG-1307, Revision 9, September 2000.¹
6. R. I. Smith, G. J. Konzek, and W. E. Kennedy, Jr., "Technology, Safety, and Costs of Decommissioning a Reference Pressurized Water Reactor Power Station" (prepared by Pacific Northwest Laboratory for the U.S. Nuclear Regulatory Commission), NUREG/CR-0130, June 1978; and Addendum 1, July 1979, Addendum 2, July 1983; Addendum 3, September 1984; and Addendum 4, July 1988.¹
7. H. D. Oak et al., "Technology, Safety, and Costs of Decommissioning a Reference Boiling Water Reactor Power Station" (prepared by Pacific Northwest Laboratory for the U.S. Nuclear Regulatory Commission), NUREG/CR-0672, June 1980; Addendum 1, July 1983; Addendum 2, September 1984; and Addendum 3, July 1988.¹
8. U.S. Nuclear Regulatory Commission, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors," Draft Regulatory Guide DG-1085, November 2001.²
9. U.S. Nuclear Regulatory Commission, "10 CFR 50.75(f)(1), Report on the Status of Decommissioning," Regulatory Issue Summary 2001-07, February 23, 2001.

¹ Copies are available at current rates from the U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20402-9328 (telephone (202)512-1800); or from the National Technical Information Service by writing NTIS at 5285 Port Royal Road, Springfield, VA 22161; <<http://www.ntis.gov/ordernow>>; telephone (703)487-4650. Copies are available for inspection or copying for a fee from the NRC Public Document Room at 11555 Rockville Pike, Rockville, MD; the PDR's mailing address is USNRC PDR, Washington, DC 20555; telephone (301)415-4737 or (800)397-4209; fax (301)415-3548; email is PDR@NRC.GOV.

² Requests for single copies of draft or active regulatory guides (which may be reproduced) or for placement on an automatic distribution list for single copies of future draft guides in specific divisions should be made in writing to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Reproduction and Distribution Services Section, or by fax to (301)415-2289; email <DISTRIBUTION@NRC.GOV>. Copies are available for inspection or copying for a fee from the NRC Public Document Room at 11555 Rockville Pike (first floor), Rockville, MD; the PDR's mailing address is USNRC PDR, Washington, DC 20555; telephone (301)415-4737 or 1-(800)397-4209; fax (301)415-3548; e-mail <PDR@NRC.GOV>.

10. C.L. Pittiglio, "Standard Review Plan for Evaluating Nuclear Power Reactor License Termination Plans," NUREG-1700, U.S. Nuclear Regulatory Commission, April 2000.
11. U.S. Nuclear Regulatory Commission, "Standard Format and Content of License Termination Plans for Nuclear Power Reactors," Regulatory Guide 1.179, January 1998.²

APPENDIX A GLOSSARY OF FINANCIAL TERMS

Certificate of Deposit (CD) - A bank's, or other financial institution's, written acknowledgment of the receipt and deposit of a sum of money by the licensee or applicant and its promise of repayment. When using a CD to demonstrate financial assurance for decommissioning, the licensee deposits with a bank or other financial institution funds sufficient to cover the certification amount or site-specific cost of decommissioning the licensed facility and receives a CD.

Contractual Obligations - Obligations on the part of a licensee's customers, the total amount of which over the duration of the contracts will provide the licensee's total share of uncollected funds to be needed for decommissioning according to 10 CFR 50.75(c), 50.75(f), or 50.82.

Escrow Account - An account containing funds deposited by the licensee or applicant and held by a bank or other financial institution. An escrow account differs from similar accounts in that the licensee or applicant provides funds that are held by the escrow until the happening of a contingency or the performance of a condition such as commencement of decommissioning, and then the funds are released to the grantor or the grantor's designee or, if appropriate, placed in the standby trust.

External Sinking Fund - A fund established and maintained by setting funds aside periodically in an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates in which the total amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, deposit of government securities, or other payment acceptable to the NRC.

Financial Test - An accounting ratio requirement, net worth requirement, bond rating requirement, or similar requirement or combination of requirements that measures the financial strength of a firm providing financial assurance. The financial test is used by a firm that provides a guarantee to a licensee to show its own financial strength and its ability to support the guarantee. This mechanism is unavailable to electric utility (power reactor) licensees. (See Appendix A to 10 CFR Part 30.)

Insurance - Insurance in this case would be similar to surety bonding as discussed below in that it would guarantee that decommissioning costs will be paid to a trustee should the licensee default.

Letter of Credit - A binding agreement by which the issuing party, such as a bank or other financial institution, agrees on behalf of the applicant or licensee (the account party) to pay a governmental or government-approved authority (the beneficiary) in the event of any default by the licensee in the performance of decommissioning.

Line of Credit - An arrangement of the licensee with a lender (a bank or other financial institution) in which the lender agrees to provide funds required for decommissioning of the licensee's facility. The maximum amount of credit stated in the contract between the applicant or licensee and the lender must be at least sufficient to equal the certified or estimated cost of decommissioning.

Parent Company Guarantee - A promise by one party (the guarantor) to pay specified debts or perform specified obligations of another party (the principal) in the event that the principal fails to satisfy the debts or obligations. Specifically, to satisfy the decommissioning regulations, an applicant's or licensee's parent corporation guarantees providing specified dollar amounts to fund performance of decommissioning in the event of the licensee's default. A parent company guarantee can only be used if the parent company passes a financial test. (See Appendix A to 10 CFR Part 30.)

Prepayment - The deposit preceding the start of operation, or the transfer of a license pursuant to 10 CFR 50.80 into an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, deposit of government securities, or other payment acceptable to the NRC.

Standby Trust Fund - A trust fund (see below) set up to receive funds from a surety, letter of credit, insurance, or guarantee when payment is made from them to ensure that the funds remain available for decommissioning.

Surety Bond - A guarantee that decommissioning costs will be paid should the licensee default. The surety bond is a contract that the licensee or applicant (the principal) enters into with a qualified surety company (the surety) to assure the Commission or State regulatory agency that the licensee will fulfill its decommissioning obligations. In the event of the licensee's default, the surety guarantees that decommissioning costs will be paid.

Trust Fund - A three-party agreement whereby the licensee or applicant, called the grantor or trustor, transfers assets to a trustee, such as a bank, other financial institution, or governmental authority, to hold on behalf of the beneficiary (e.g., the Commission or a State agency). The assets may be at least equal to the cost of decommissioning (prepayment) or may build up over time such that the amount of funds should be sufficient to pay decommissioning costs (external sinking fund).

APPENDIX B
EXAMPLES OF FINANCIAL ASSURANCE INSTRUMENTS

The following formats for financial assurance instruments provide examples of language and provisions for compliance with financial assurance requirements for decommissioning for some of the mechanisms allowed in NRC's regulations. Although the specific language is not required by decommissioning regulations, except for certain provisions, applicants and licensees will find that its use will simplify the submittal process. Licensees may add, delete, or modify sample provisions as their circumstances warrant. However, licensees should ensure that the financial assurance instruments being used are valid under applicable State law and comply with NRC's decommissioning regulations in 10 CFR 50.33, 50.75, and 50.82.

APPENDIX B-1
SAMPLE ESCROW AGREEMENT

ESCROW NUMBER _____

Paragraph 1. Establishment of Escrow Account

It is agreed between the parties that [insert name of licensee], licensee, has elected to establish an escrow account with [insert name, address, and position of escrow agent] to provide financial assurance for decommissioning of the facility(ies) in the amounts shown below:

[For each facility for which financial assurance is provided by the escrow agreement, list facility name, address, and license and/or docket number, corresponding estimated or certified decommissioning costs, and indicate amount of financial assurance provided by the escrow account.]

Paragraph 2. Description of Property in Escrow Account

It is hereby acknowledged by the parties that [list the assets that have been delivered to the escrow agent and indicate the value of each item] has (have) been delivered to escrow and will remain in the escrow account created by this agreement until one of the two conditions stated in Paragraph 3 of this agreement has been satisfied.

[Insert name of licensee] warrants to and agrees with [insert name of escrow agent] that, unless otherwise expressly set forth in this Agreement: there is no security interest in the property in the escrow account or any part thereof; no financing statement under the Uniform Commercial Code is on file in any jurisdiction claiming a security interest in or describing (whether specifically or generally) the escrow account or any part thereof; and the escrow agent shall have no responsibility at any time to ascertain whether or not any security interest exists or to file any financing statement under the Uniform Commercial Code with respect to the escrow account or any part thereof.

Paragraph 3. Conditions of Escrow Agreement

The property described in Paragraph 2, above, will remain in the escrow account created by this agreement until one of the two following conditions has been satisfied: (1) the decommissioning activities required by 10 CFR Part 50 have been authorized pursuant to paragraph 4 or completed, the license has been terminated, the facility site is available for use for public or private purpose, pursuant to NRC regulations, or the escrow account has been terminated by notice, in writing, from [insert name of licensee] or (2) the escrow agent, [insert name of the escrow agent], has been notified by the [insert NRC or name of the State regulatory agency], in writing, that the licensee, [name of licensee], has defaulted on the agreed obligation to carry out the decommissioning for the above listed facility(ies).

Paragraph 4. Disbursement of Property in Escrow Account

The [insert name of escrow agent] shall make payments from the escrow account upon the presentation of a certificate duly executed by the Secretary or appropriate Officer of the [insert name

of licensee] attesting to the occurrence of the events, and in the form set forth in the attached Specimen Certificate, and upon presentation of a certification attesting to the following conditions:

- (1) that decommissioning is proceeding pursuant to an NRC-noticed or -approved plan, and
- (2) that the funds withdrawn will be expended for activities undertaken pursuant to that plan.

Or upon [insert name of escrow agent] receiving written notification of licensee default from the [insert NRC or State regulatory agency], [insert name of escrow agent] shall make payments from the escrow account as the [insert NRC or name of State regulatory agency] shall direct, in writing, to provide for the payment of the costs of the required decommissioning activities covered by this agreement. The escrow agent shall reimburse the licensee or other persons as specified by the [insert NRC or State regulatory agency] from the escrow account for expenses for required activities in such amounts as the [insert NRC or name of the State regulatory agency] shall direct in writing. In addition, the escrow agent shall refund to [insert name of licensee] such amounts as the [insert NRC or the name of the State regulatory agency] specifies, in writing. Upon refund, such funds shall no longer constitute part of the escrow account as described in paragraph 2, above.

Except for withdrawals being made pursuant to 10 CFR 50.82(a)(8), no disbursement or payment may be made from the trust, escrow account, government fund, or other account used to segregate and manage the funds until written notice of the intention to make a disbursement or payment has been given to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days prior to the date of the intended disbursement or payment. The disbursement or payment from the trust, escrow account, government fund or other account may be made following the 30-day notice period if the person responsible for managing the trust, escrow account, government fund, or other account does not receive written notice of objection from the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, within the notice period. Disbursements or payments from the trust, escrow account, government fund, or other account used to segregate and manage the funds, other than for payment of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, are restricted to decommissioning expenses or transfer to another financial assurance method acceptable under 10 CFR 50.75(e) until final decommissioning has been completed. After decommissioning has begun and withdrawals from the decommissioning fund are made pursuant to 10 CFR 50.82(a)(8), no further notification need be made to the NRC.

Paragraph 5. Irrevocability

It is also agreed between the parties that this escrow is revocable upon delivery to [insert name of escrow agent], the escrow agent, only on the occurrence of one of the conditions described in Paragraph 3 above or by transfer of the funds held in escrow to another financial assurance mechanism permitted under 10 CFR 50.75(e).

Paragraph 6. Powers of the Escrow Agent

The only powers and duties of the escrow agent shall be to hold the escrow property and to invest and dispose of it in accordance with the terms of this agreement.

Escrow Account Management

The escrow agent shall invest and reinvest the principal and income of the escrow account and keep the escrow account invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the (insert name of licensee) may communicate in writing to the escrow agent from time to time, subject, however, to the provisions of the escrow account; the escrow agent shall discharge its duties with respect to the escrow account solely in the interest of (insert name of licensee's) decommissioning obligation and with the care, skill, prudence, and diligence, under the circumstances then prevailing, that persons of prudence, acting in like capacity and familiar with such matters, would use in the conduct of an enterprise of like character and with like aims; except that:

- (a) Securities or other obligations of the licensee, or any other owner or operator of the facilities, or any of their affiliates, subsidiaries, successors, or assigns, as defined in the Investment Company Act of 1940, as amended (15 U. S. C. 80A-2(a)), or no more than 10 percent of their trust assets in securities of any other entity owning one or more nuclear power plants, or in a mutual fund in which at least 50 percent of the fund is invested in the securities of a parent company whose subsidiary is an owner of a foreign or domestic nuclear power plant except for investments tied to market indices or other non-nuclear-sector collective, commingled, or mutual funds, shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government.
- (b) Securities or other obligations of the licensee, or any other owner or operator of the licensed facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended (15 U.S.C. 80A.2(a)), except for investments tied to market indices or other non-nuclear-sector collective, commingled, or mutual funds, shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government.
- (c) For a reasonable time, not to exceed ___ days, the escrow agent is authorized to hold uninvested cash, awaiting investment or distribution, without liability for the payment of interest thereon.

The licensee, its affiliates, and its subsidiaries are prohibited from being engaged as investment manager for the funds or from giving day-to-day management direction of the funds' investments or direction on individual investments by the funds, except in the case of passive fund management of trust funds where such management is limited to investments tracking market indices.

Express Power of the Escrow Agent

Without in any way limiting the powers and discretion conferred upon the escrow agent by other provisions of this agreement or by law, the escrow agent is expressly authorized and empowered:

(a) To register any securities held in the escrow account in its own name and to hold any security in bearer form or in book entry, or to deposit or arrange for the deposit of any securities issued by the U.S. Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the escrow agent shall at all times show that all such securities are part of the escrow account;

(b) To deposit any cash in the escrow account in interest-bearing accounts or savings certificates;

(c) To pay taxes, from the account, of any kind that may be assessed or levied against the escrow account and all brokerage commissions incurred by the escrow account.

Paragraph 7. Annual Valuation

After delivery has been made into this escrow account, the escrow agent shall [monthly, quarterly, annually] furnish to the licensee a statement confirming the value of the escrow account. Any securities in the account shall be valued at market value within a reasonable time before issuance of such statement. The failure of the licensee to object in writing to the escrow agent within 90 days after the statement has been furnished to the licensee shall constitute a conclusively binding assent by the licensee, barring the licensee from asserting any claim or liability against the escrow agent with respect to the matters disclosed in the statement.

Paragraph 8. Successor Escrow Agent

Upon 90 days prior notice to the licensee, [insert name of licensee], the escrow agent may resign; upon 90 days notice to the escrow agent, the licensee, [insert name of licensee], may replace the escrow agent provided that such resignation or replacement is not effective until the escrow agent has appointed a successor escrow agent and this successor accepts the appointment or another financial assurance instrument has been secured pursuant to paragraph 5. The successor escrow agent shall have the same powers and duties as those conferred upon the escrow agent under this agreement. Upon the successor's acceptance of the appointment, the escrow agent shall assign, transfer, and pay over to the successor the funds and properties then constituting the escrow account. If for any reason the licensee cannot or does not act in the event of the resignation of the escrow agent, the escrow agent may apply to a court of competent jurisdiction for the appointment of a successor, or for instructions. The successor escrow agent shall specify the date on which it assumes administration of the escrow account in a writing sent to the licensee and the current escrow agent by certified mail 10 days before the change becomes effective. Any expense incurred by the escrow agent as a result of any of the acts contemplated by this paragraph shall be paid as provided in Paragraph 10 of this agreement.

Paragraph 9. Instructions to the Escrow Agent

All orders, requests, and instructions from the licensee to the escrow agent shall be in writing, signed by such persons as are signatories to this agreement, or such other designees as the licensee may designate in writing. All orders, requests, and instructions from the [insert the NRC or the name of the State regulatory agency] shall be in writing, signed by the designees of the [insert NRC or the

name of the State regulatory agency]. The escrow agent shall be fully protected in acting in accordance with such orders, requests, and instructions. The escrow agent shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the licensee or [insert the NRC or the name of the State regulatory agency] under this agreement has occurred. The escrow agent shall have no duty to act in the absence of such orders, requests, and instructions from the licensee and/or [insert the NRC or the name of the State regulatory agency], except as provided in this agreement.

Paragraph 10. Compensation and Expenses of the Escrow Agent

The fee of the escrow agent for its services in establishing the escrow account shall be \$_____, payable at the time of the execution of this agreement, to be borne by [insert the name of the licensee], licensee.

Expenses of the escrow agent for the administration of the escrow account, the compensation of the escrow agent for services subsequent to the establishing of the escrow account to the extent not paid directly by the licensee, and all other proper charges and disbursements shall be paid from the escrow account.

Paragraph 11. Amendment to This Agreement

This agreement may be amended by an instrument in writing executed by the licensee and the escrow agent. However, this agreement may not be amended in any material respect without written notification to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days prior to the proposed effective date of the amendment. The escrow account may not be amended if the person responsible for managing that account receives written notice of objection from the either the Director of the Office of Nuclear Reactor Regulation or the Office of Office of Nuclear Material Safety and Safeguards, as applicable, within the notice period.

Paragraph 12. Termination

This agreement can be terminated by written notice of termination to the escrow agent signed by [insert the name of licensee], licensee, and by the [insert NRC or the name of the State regulatory agency] alone, if the licensee has ceased to exist.

Paragraph 13. Interpretation

This escrow agreement constitutes the entire agreement between [insert the name of licensee] and [insert the name of the escrow agent]. The escrow agent shall not be bound by any other agreement or contract entered into by [insert name of licensee] and the only document that may be referenced in case of ambiguity in this escrow agreement is the licensing agreement between [insert name of licensee] and the United States Nuclear Regulatory Commission, or its successor.

Paragraph 14. Acceptance of Appointment by Escrow Agent

[Insert name, address, and position of escrow agent] does hereby acknowledge its appointment by [insert name of licensee], the licensee to serve as escrow agent for the escrow account created under this agreement and agrees to carry out its obligations and duties as stated in this escrow agreement.

Paragraph 15. Severability

If any part of this agreement is invalid, it shall not affect the remaining provisions, which remain valid and enforceable.

Paragraph 16. Effectiveness

This agreement shall not become effective (and the escrow agent shall have no responsibility hereunder except to return the escrow property to the [insert name of licensee]) until the escrow agent shall have received the following and shall have advised [insert name of licensee] in writing that the same are in form and substance satisfactory to the escrow agent:

Certified resolution of its Board of Directors authorizing the making and performance of this Agreement;

Certificate as to the names and specimen signatures of its officers or representative authorized to sign this Agreement and notices, instructions, and other communications hereunder.

[Signatures and positions of the designees of the licensee and the escrow agent.]

[Insert name of escrow agent]	[Insert name of licensee]
By _____	By _____
Name _____	Name _____
Title _____	Title _____

Date

Witness by Notary Public

APPENDIX B-1.1
SAMPLE CERTIFICATE OF EVENTS

[Insert name and address of escrow agent]

Attention: Escrow Division

Gentlemen:

In accordance with the terms of the Agreement with you dated _____, I, _____, [Authorized Officer] of [insert name of licensee], hereby certify that the following events have occurred:

1. [Insert name of licensee] has begun the decommissioning of its facilities located at [insert location of facility] (hereinafter called the decommissioning).
2. Ninety days after the plans and procedures for the commencement and conduct of the decommissioning have been either noticed in the *Federal Register* by the United States Nuclear Regulatory Commission, or its successor (copy of notice attached), or in the case of a license termination plan, approved by the NRC, or its successor (copy of approval attached).
3. The Board of Directors of [insert name of licensee] has adopted the attached resolution authorizing the commencing of the decommissioning.

[Authorized Officer] of [insert name of licensee]

Date

APPENDIX B-1.2
SAMPLE CERTIFICATE OF RESOLUTION

I, _____, do hereby certify that I am [Authorized Officer] of [insert name of licensee], a [insert State of incorporation] corporation, and that the resolution listed below was duly adopted at a meeting of this Corporation's Board of Directors on _____, 20__.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the seal of this Corporation this ____ day of _____, 20__.

[Authorized Officer] of
[insert name of licensee]

RESOLVED, that this Board of Directors hereby authorizes the President or such other employee of the Company as he may designate [insert name, as appropriate, "to enter into an escrow agreement," or "to commence decommissioning activities at (name of facility)"] with the [insert name of escrow agent] in accordance with the terms and conditions described to this Board of Directors at this meeting and with such other terms and conditions as the President shall have approved with and upon the advice of Counsel.

**APPENDIX B-2
SAMPLE CERTIFICATES OF DEPOSIT**

**APPENDIX B-2.1
SAMPLE NEGOTIABLE CERTIFICATE OF DEPOSIT
PAYABLE AT THE EXPIRATION OF
A SPECIFIED TIME**

CERTIFICATE OF DEPOSIT

(Financial Institution)

Place _____

No. _____

(Date)

[Insert name of licensee or applicant] has deposited not subject to check _____ Dollars (\$ _____) payable to the order of the holder in current funds not less than 30 days days after date, upon surrender of this certificate properly endorsed, with interest at the rate of _____ percent per annum from date to maturity only. The rate of interest payable hereunder is subject to change by the bank to such extent as may be necessary to comply with requirements of the Federal Reserve Board made from time to time pursuant to the Federal Reserve Act.

These funds are deposited for the purpose of providing financial assurance for the cost of decommissioning activities as required under Title 10 of the Code of Federal Regulations, Part 50. Accordingly, this certificate will be renewed automatically unless written notice of (1) the default of the [insert name of licensee or applicant] on these obligations; (2) the termination of the facility license; or (3) the substitution of another financial assurance mechanism is received from [the name of licensee or applicant]

Cashier or Officer

Note:

The negotiable Certificate of Deposit should be in the possession of the trustee of the concurrently created standby trust or the escrow agent of an escrow account.

The certificate should be for a limited time period, such as 1 to 5 years, so that the face value can be adjusted.

APPENDIX B-2.2

**SAMPLE NONNEGOTIABLE CERTIFICATE OF DEPOSIT
PAYABLE ON A CERTAIN DATE**

CERTIFICATE OF DEPOSIT

(Financial Institution)

Certificate of Deposit _____, 20__

[Insert name of licensee or applicant] has deposited in the financial institution the sum of _____ Dollars (\$ _____) payable to [State regulatory agency (if the agency can hold special funds under applicable state law), trustee of standby trust, or escrow agent] _____ months after date, with interest thereon at the rate of _____ percent per annum from date, upon presentation of this certificate properly endorsed. These funds are deposited for the purpose of providing financial assurance for the cost of decommissioning activities as required under Part 50 of Title 10 of the Code of Federal Regulations. Accordingly, this certificate will be renewed automatically unless written notice of (1) the default of the [insert name of licensee or applicant] on these obligations; (2) the termination of the facility license; or (3) the substitution of another financial assurance mechanism is received from [the name of the licensee or applicant].

Cashier or Officer

Note: The certificate should be for a limited time period, such as 1 to 5 years, so that the face value can be adjusted.

APPENDIX B-3
SAMPLE TRUST FUND AND STANDBY TRUST AGREEMENTS

APPENDIX B-3.1
SAMPLE TRUST FUND AGREEMENT

TRUST AGREEMENT, the Agreement is entered into as of [date] by and between [name of NRC licensee], a [name of State] [insert “corporation,” “partnership,” “association,” or “proprietorship”], herein referred to as the “Grantor,” and [name and address of an appropriate State or Federal government agency or an entity that has the authority to act as trustee and whose trust operations are regulated or examined by a State or Federal agency], the “Trustee.”

WHEREAS, the U.S. Nuclear Regulatory Commission (NRC), an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part 50. These regulations, applicable to the Grantor, require that a holder of, or an applicant for a license issued pursuant to 10 CFR Part 50 provide assurance that funds will be available when needed for required decommissioning activities.

WHEREAS, the Grantor has elected to use a trust fund to provide [insert “all” or “part”] of such financial assurance for the facilities identified herein and also provide such additional decommissioning funds not required by the NRC as the Grantor may elect;

WHEREAS, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

- (a) The term “Grantor” means the NRC licensee who enters into this Agreement and any successors or assigns of the Grantor.
- (b) The term “Trustee” means the trustee who enters into this Agreement and any successor Trustee.

Section 2. Costs of Decommissioning. This Agreement pertains to the costs of decommissioning the facility identified in License Number [insert license number] issued pursuant to 10 CFR Part 50.

Section 3. Establishment of Fund. The Grantor and Trustee hereby establish a Trust Fund (the Fund) for the benefit of [insert the Grantor or other appropriate beneficiary such as a State agency or the NRC]. The Grantor and the Trustee intend that no third party shall have access to the Fund except as provided herein. [Modification of this provision to cover sale-leaseback agreements should be made contingent upon continued dedication of the trust to provide funds for decommissioning.]

Section 4. Payments Constituting the Fund. Payments made to the Trustee for the Fund shall consist of cash, securities, or other liquid assets acceptable to the Trustee. The Fund is established initially as consisting of property acceptable to the Trustee. Such property and any other property subsequently transferred to the Trustee are referred to as the "Fund," together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided.

Section 5. Payment for Required Activities Specified in the Plan. The Trustee shall make payments from the Fund to the Grantor or to a decommissioning contractor of the Grantor as the Grantor may designate upon presentation to the Trustee of the following:

- a. A certificate duly executed by the [Authorized Officer] of the Grantor attesting to the occurrence of the events, and in the form set forth in the attached Specimen Certificate (see certificate following standby trust), and
- b. A certificate attesting to the following conditions;
 - (1) that decommissioning is proceeding pursuant to an NRC-noticed plan, and
 - (2) that the funds withdrawn will be expended for activities undertaken pursuant to that Plan.

Notwithstanding the foregoing, except for payments for administrative costs (including taxes) and other incidental expenses of the Fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the Fund, no disbursements or payments from the Fund shall be made: (1) unless 30 working days prior written notice of such disbursement or payment has been made to the NRC or (2) if the Trustee receives written notice of an objection from the NRC's Director of the Office of Nuclear Reactor Regulation or the Director of the Office of Nuclear Material Safety and Safeguards, as applicable. Except that, the foregoing shall not apply if the Grantor is making a withdrawal pursuant to 10 CFR 50.82(a)(8).

In the event of the Grantor's default or inability to direct decommissioning activities, the Trustee shall: (1) make payments from the Fund as the NRC or State agency shall direct, in writing, to provide for the payment of the costs of required activities covered by this Agreement; (2) make disbursements to the Grantor or other persons as specified by the NRC, or State agency, from the Fund for expenditures for required activities in such amounts as the NRC, or State agency, shall direct in writing; and (3) refund to the Grantor such amounts remaining after the license has been terminated or as the NRC or State Agency specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 6. Trust Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge its duties with respect to the Fund in the best interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting

in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

- (a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates, subsidiaries, successors, or assigns, as defined in the Investment Company Act of 1940, as amended (15 U. S. C. 80A-2(a)), or no more than 10 percent of their trust assets in securities of any other entity owning one or more nuclear power plants, or in a mutual fund in which at least 50 percent of the fund is invested in the securities of a parent company whose subsidiary is an owner of a foreign or domestic nuclear power plant except for investments tied to market indices or other non-nuclear-sector collective, commingled, or mutual funds, shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government.
- (b) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended (15 U.S.C. 80A-2(a)), except for investments tied to market indices or other non-nuclear-sector collective, commingled, or mutual funds, shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government; and
- (c) For a reasonable time, not to exceed ___ days, the Trustee is authorized to hold uninvested cash, awaiting investment or distribution, without liability for the payment of interest thereon.
- (d) Any person directing investments made in the trusts shall adhere to the [applicable State-specific investment standard and/or the] “prudent investor” standard as specified in 18 CFR 35.32(a)(3) of the Federal Energy Regulatory Commission regulations or any successor regulation thereto (the “Prudent Investor Standard”); and
- (e) The Grantor, its affiliates, and its subsidiaries are prohibited from acting as investment manager for the funds or from giving day-to-day management direction of the funds’ investments or direction on individual investments by the funds.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940 (15 U.S.C. 80A-1 et seq.), including one that may be created, managed, underwritten, or to which investment advice is rendered, or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale, as necessary, for prudent management of the Fund;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name, or in the name of a nominee, and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, to reinvest interest and dividends payments and funds from matured and redeemed instruments, to file proper forms concerning securities held in the Fund in a timely fashion with appropriate government agencies, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee or such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the U.S. Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund may be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee may be paid from the Fund.

Section 10. Annual Valuation. After payment has been made into this Trust Fund, the Trustee shall [monthly, quarterly, annually] furnish to the Grantor a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value within a reasonable time of such statement. The failure of the Grantor to object in writing to the Trustee within ___ days after the statement has been furnished to the Grantor shall constitute a conclusively binding assent by the Grantor, barring the grantor from asserting any claim or liability against the Trustee with respect to the matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting on the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. Upon ___ days notice to the Grantor, the Trustee may resign; upon ___ days notice to the Trustee, the Grantor may replace the Trustee; but such resignation or replacement shall not be effective until the Grantor has either appointed a successor Trustee and this successor accepts the appointment or implements another financial assurance mechanism specified in Title 10, Chapter I, Code of Federal Regulations, Section 50.75(e). The successor Trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor Trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor Trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor Trustee or for instructions. The successor Trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor and the present Trustee by certified mail ___ days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are signatories to this agreement or such other designees as the Grantor may designate in writing. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. If the NRC or State agency issues orders, requests, or instructions to the Trustee in the event of Grantor default, these shall be in writing, signed by the NRC, State agency, or their designees, and the Trustee shall act and shall be fully protected in acting, in accordance with such orders requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor, the NRC, or State agency, hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the NRC, or State agency, except as provided for herein.

Section 15. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee and, if applicable, the NRC or State agency, or by the Trustee and the NRC or State agency if the Grantor ceases to exist. Notwithstanding any provision herein to the contrary, this Agreement cannot be modified in any material respect without first providing 30 working days prior written notice to the NRC's Director of the Office of Nuclear Reactor Regulation or the Director of the Office of Nuclear Material Safety and Safeguards, as applicable.

Section 16. Termination. This trust agreement shall continue until terminated at the written agreement of the Grantor, the Trustee and, if applicable, the NRC or State agency, or by the Trustee and the NRC or State agency if the grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor or its successor, or transferred to another financial assurance mechanism specified in 10 CFR 50.75(e), as appropriate.

Section 17. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this trust,

or in carrying out any directions by the Grantor, the NRC, or State agency, issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the trust fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 18. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of [insert name of State].

Section 19. Interpretation and Severability. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement. If any part of this agreement is invalid, it shall not affect the remaining provisions which will remain valid and enforceable.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by the respective officers duly authorized and the incorporate seals to be hereunto affixed and attested as of the date first written above.

ATTEST:

[Insert name of licensee (Grantor)]
[Signature of representative of Grantor]
[Title]

[Title]
[Seal]

[Insert name of Trustee]
[Signature of representative of Trustee]
[Title]

ATTEST:

[Title]
[Seal]

APPENDIX B-3.2

SAMPLE STANDBY TRUST AGREEMENT

TRUST AGREEMENT, the Agreement entered into as of [date] by and between [name of NRC licensee], a [name of State] [insert "corporation," "partnership," "association," or "proprietorship"], herein referred to as the "Grantor," and [name and address of an appropriate State or Federal government agency or an entity that has the authority to act as trustee and whose trust operations are regulated or examined by a State or Federal agency], the "Trustee."

WHEREAS, the U.S. Nuclear Regulatory Commission (NRC), an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part 50. These regulations, applicable to the Grantor, require that a holder of, or an applicant for, a Part 50 license provide assurance that funds will be available when needed for required decommissioning activities.

WHEREAS, the Grantor has elected to use a [insert "letter of credit," "line of credit," "surety bond," "insurance policy," "parent guarantee," "certificate of deposit," or "deposit of government securities"] to provide [insert "all" or "part"] of such financial assurance for the facilities identified herein; and

WHEREAS, when payment is made under a [insert "letter of credit," "line of credit," "surety bond," "insurance policy," "certificate(s) of deposit," "deposit of government securities," or "parent guarantee"], this standby trust shall be used for the receipt of such payment; and

WHEREAS, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, the Grantor and the Trustee agree as follows:

[The remainder of the recommended wording for the Standby Trust Agreement is as indicated in B.3.1 for the Trust Fund Agreement except that the words "Standby Trust Fund" should be substituted in Section 3 and Section 10 in place of the words "Trust Fund."]

APPENDIX B-3.2.1

SAMPLE CERTIFICATE OF EVENTS

[Insert name and address of trustee]

Attention: Trust Division

Gentlemen:

In accordance with the terms of the Agreement with you dated _____, I, _____, [Authorized Officer] of [insert name of licensee], hereby certify that the following events have occurred:

1. [Insert name of licensee] has begun the decommissioning of its facility located at [insert location of facility] (hereinafter called the decommissioning).
2. The plans and procedures for the commencement and conduct of the decommissioning have been noticed and approved by the U.S. Nuclear Regulatory Commission, or its successor, on _____ (copy of approval attached).
3. The Board of Directors of [insert name of licensee] has adopted the attached resolution authorizing the commencement of the decommissioning.

[Authorized Officer] of [insert name of licensee]

Date

APPENDIX B-3.2.2

SAMPLE CERTIFICATE OF RESOLUTION

I, _____, do hereby certify that I am [Authorized Officer] of [insert name of licensee], a [insert state of incorporation) corporation, and that the resolution listed below was duly adopted at a meeting of this Corporation's Board of Directors on _____, 20 ____.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the seal of this Corporation this ____ day of _____, 20 ____.

[Authorized Officer]

RESOLVED, that this Board of Directors hereby authorizes the President, or such other employee of the Company as he may designate, to commence decommissioning activities at [insert name of facility) in accordance with the terms and conditions described to this Board of Directors at this meeting and with such other terms and conditions as the President shall approve with and upon the advice of Counsel.

**APPENDIX B-3.3
SAMPLE OF ACKNOWLEDGMENT**

ACKNOWLEDGMENT

[The following is an example of the acknowledgment that should accompany the trust agreement for a standby trust fund or trust fund.]

STATE OF _____

To Wit _____

CITY OF _____

On this _____ day of _____, before me, a notary public in and for the city and State aforesaid, personally appeared _____, and she/he did depose and say that she/he is the [title], of [financial institution], Trustee, which executed the above instrument, that she/he knows the seal of said association; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the association; and that she/he signed her/his name thereto by like order.

[Signature of notary public]

My Commission Expires: _____
[Date]

APPENDIX B-4
SAMPLE PAYMENT SURETY BOND

PAYMENT SURETY BOND

Date bond executed: _____

Effective date: _____

Principal: [legal name and business address of licensee or applicant]

Type of organization: [insert "proprietorship," "joint venture," "partnership" or "corporation"]

State of incorporation: _____ (if applicable)

NRC license number, name and address of facility, and amount(s) for decommissioning activity guaranteed by this bond: _____

Surety(ies) [name(s) and business address(es)]

Type of organization: [insert "proprietorship," "joint venture," "partnership" or "corporation"]

State of incorporation: _____ (if applicable)

Surety's qualification in jurisdiction where licensed facility(ies) is (are located)

Surety's bond number: _____

Total penal sum of bond: \$ _____

Know all persons by these presents, That we, the Principal and Surety(ies) hereto, are firmly bound to the [insert U.S. Nuclear Regulatory Commission (hereinafter called NRC) or the name of the State agency] in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety; but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

WHEREAS, the NRC, an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part 50, applicable to the Principal, which require that a license holder or an applicant for a license provide financial assurance that funds will be available when needed for facility decommissioning;

NOW, THEREFORE, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of decommissioning of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility;

Or, if the Principal shall fund the standby trust fund in such amount(s) after an order to begin facility decommissioning is issued by [insert "the NRC" or the name of the State agency] or a U.S. district court or other court of competent jurisdiction;

Or, if the Principal shall provide alternative financial assurance and obtain the written approval of the [insert "NRC" or the name of the State agency] of such assurance, within 30 days after the date a notice of cancellation from the Surety(ies) is received by both the Principal and the [insert "NRC" or the name of the State agency], then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the [insert "NRC" or the name of the State agency] that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the [insert "NRC" or the name of the State agency] provided, however, that cancellation shall not occur during the 90 days beginning on the date of receipt of the notice of cancellation by both the Principal and the [insert "NRC" or the name of the State agency], as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the [insert "NRC" or name of State agency] and to Surety(ies) 90 days prior to the proposed date of termination, provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond from the [insert "NRC" or the name of the State agency].

The Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new amount, provided that the penal sum does not increase by more than 20 percent in any one year.

In Witness Whereof, the Principal and Surety(ies) have executed this financial guarantee bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies).

Principal

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate seal]

Corporate Surety(ies)

[Name and address]

State of incorporation: _____

Liability limit: \$_____

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety(ies) above.]

Bond premium: \$_____

APPENDIX B-5
SAMPLE IRREVOCABLE STANDBY LETTER OF CREDIT

STANDBY LETTER OF CREDIT NO. [INSERT NO.]

This Credit Expires [insert date]

Issued To: [Insert U.S. Nuclear Regulatory Commission; Washington, DC 20555, or name and address of appropriate State agency.]

Dear Sir or Madam:

We hereby establish our Standby Letter of Credit No. _____ in your favor, at the request and for the account of [applicant's name and address] up to the aggregate amount of [in words], U. S. dollars \$ _____ available upon presentation of:

- (1) your sight draft, bearing reference to this Letter of Credit No. _____ and
- (2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of _____."

This letter of credit is issued in accordance with regulations issued under the authority of the U.S. Nuclear Regulatory Commission (NRC), an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974. The NRC has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part 50, which require that a holder of, or an applicant for, a license issued under 10 CFR Part 50 provide assurance that funds will be available when needed for decommissioning.

This letter of credit is effective as of [date] and shall expire on [date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [date] and on each successive expiration date, unless, at least 90 days before the current expiration date, we notify both you and [licensee's name], as shown on the signed return receipts. If [licensee's name] is unable to secure alternative financial assurance to replace this letter of credit within 30 days of notification of cancellation, the NRC may draw upon the full value of this letter of credit prior to cancellation. We shall give immediate notice to the applicant and the [insert "NRC" or name of State agency] of any notice received or action filed alleging (1) the insolvency or bankruptcy of the financial institution or (2) any violations of regulatory requirements that could result in suspension or revocation of the bank's charter or license to do business. We also shall give immediate notice if we, for any reason, become unable to fulfill our obligation under the letter of credit.

Whenever this letter of credit is drawn on, under, and in compliance with the terms of this letter of credit, we shall duly honor such draft upon its presentation to us within 30 days, and we shall deposit the amount of the draft directly into the standby trust fund of [licensee's name] in accordance with your instructions.

Each draft must bear on its face the clause: “Drawn under Letter of Credit No. _____, dated _____, and the total of this draft and all other drafts previously drawn under this letter of credit does not exceed [fill in amount].”

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to [insert “the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce,” or “the Uniform Commercial Code”].

APPENDIX B-6
SAMPLE DOCUMENTS RECOMMENDED TO
SUPPORT CORPORATE GUARANTEE

APPENDIX B-6.1
SAMPLE LETTER FROM CHIEF FINANCIAL OFFICER
OF CORPORATE PARENT, INCLUDING COST ESTIMATES AND DATA
FROM AUDITED FINANCIAL STATEMENTS

[Address to U. S. Nuclear Regulatory Commission or State regulatory agency]

I am the chief financial officer of [name and address of firm], a [insert “proprietorship,” “joint venture,” “partnership,” or “corporation”]. This letter is in support of this firm’s use of the financial test to demonstrate financial assurance, as specified in 10 CFR Part 50.

[Complete the following paragraph regarding facility(ies) and associated cost estimates. For each facility, include its license number, name, address, and current cost estimates for the specified activities.]

This firm guarantees, through the parent company guarantee submitted to demonstrate compliance under 10 CFR Part 50, the decommissioning of the following facility(ies) owned or operated by subsidiary(ies) of this firm. The current cost estimates or certified amounts for decommissioning, and the amounts being guaranteed, are shown for each facility:

<u>Name of Facility</u>	<u>Location of Facility</u>	<u>Current Cost Estimates</u>	<u>Amount Being Guaranteed</u>
-------------------------	-----------------------------	-------------------------------	--------------------------------

This firm [insert “is required” or “is not required”] to file a Form 10K with the U.S. Securities and Exchange Commission for the latest fiscal year.

This fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements and footnotes for the latest completed fiscal year, ended [date].

[Insert completed Alternative I or Alternative II.]

I hereby certify that the content of this letter is true and correct to the best of my knowledge.

[Signature]

[Name]

[Title]

[Date]

APPENDIX B-6.2
FINANCIAL TEST: ALTERNATIVE I

- | | | |
|-----|--|----------|
| 1. | Decommissioning cost estimates or guaranteed amount for facility [insert license number] (total of <u>all</u> cost estimates shown in paragraph above) | \$ _____ |
| *2. | Total liabilities (if any portion of the cost estimates for decommissioning is included in total liabilities on your firm's financial statements, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4) | \$ _____ |
| *3. | Tangible net worth** | \$ _____ |
| *4. | Net worth | \$ _____ |
| *5. | Current assets | \$ _____ |
| *6. | Current liabilities | \$ _____ |
| *7. | Net working capital (line 5 minus line 6) | \$ _____ |
| *8. | The sum of net income plus depreciation, depletion, and amortization | \$ _____ |
| *9. | Total assets in United States (required only if less than 90 percent of firm's assets are located in the United States) | \$ _____ |

- | | | <u>Yes</u> | <u>No</u> |
|-----|---|------------|-----------|
| 10. | Is line 3 at least \$10 million? | ___ | ___ |
| 11. | Is line 3 at least 6 times line 1? | ___ | ___ |
| 12. | Is line 7 at least 6 times line 1? | ___ | ___ |
| 13. | Are at least 90 percent of firms's assets located in the United States? If not, complete line 14. | ___ | ___ |
| 14. | Is line 9 at least 6 times line 1? | ___ | ___ |

Guarantor must meet two of the following three ratios:

- | | | | |
|-----|---|-----|-----|
| 15. | Is line 2 divided by line 4 less than 2.0? | ___ | ___ |
| 16. | Is line 8 divided by line 2 greater than 0.1? | ___ | ___ |
| 17. | Is line 5 divided by line 6 greater than 1.5? | ___ | ___ |

* Denotes figures derived from financial statements.

** Tangible net worth is defined as net worth minus goodwill, patents, trademarks, and copyrights.

APPENDIX B-6.3

FINANCIAL TEST: ALTERNATIVE II

1. Decommissioning cost estimates or guaranteed amount for facility [insert license number] (total cost of all cost estimates should be stated in paragraphs above) \$ _____

 2. Current bond rating of most recent unsecured issuance of this firm
 Rating _____
 Name of rating service _____

 3. Date of issuance of bond _____

 4. Date of maturity of bond _____

 - *5. Tangible net worth** (if any portion of estimates for decommissioning is included in total liabilities on your firm’s financial statements, you may add the amount of that portion to this line) \$ _____

 - *6. Total assets in United States (required only if less than 90 percent of firm’s assets are located in the United States)
- | | <u>Yes</u> | <u>No</u> |
|---|------------|-----------|
| 7. Is line 5 at least \$10 million? | ___ | ___ |
| 8. Is line 5 at least 6 times line 1? | ___ | ___ |
| 9. Are at least 90 percent of firm’s assets located in the United States? If not, complete line 10. | ___ | ___ |
| 10. Is line 6 at least 6 times line 1? | ___ | ___ |
| 11. Is the rating specified on line 2 “BBB” or better (if issued by Standard & Poor’s) or “Baa” or better (if issued by Moody’s)? | ___ | ___ |

* Denotes figures derived from financial statements.

** Tangible net worth is defined as net worth minus goodwill, patents, trademarks, and copyrights.

APPENDIX B-6.4

EXAMPLE OF AUDITOR'S SPECIAL REPORT BY CERTIFIED PUBLIC ACCOUNTANT

CONFIRMATION OF CHIEF FINANCIAL OFFICER'S LETTER

We have examined the financial statements of [company name] for the year ended [date], and have issued our report thereon dated [date]. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary.

The [company name] has prepared documents to demonstrate its financial responsibility under the NRC's financial assurance regulations, 10 CFR Part 50. This letter is furnished to assist the licensee [insert NRC license number and name] in complying with these regulations and should not be used for other purposes.

The attached schedule reconciles the specified information furnished in the chief financial officer's (CFO's) letter in response to the regulations with the company's financial statements. In connection therewith, we have

1. Confirmed that the amounts in the column "Per Financial Statements" agree with amounts contained in the company's financial statements for the year ended [date];
2. Confirmed that the amount in the column "Per CEO's Letter" agrees with the letter prepared in response to the NRC's request;
3. Confirmed that the amount in the column "Reconciling Items" agrees with analyses prepared by the company setting forth the indicated items; and
4. Recomputed the totals and percentages.

Because the procedures in 1-4 above do not constitute a full examination made in accordance with generally accepted auditing standards, we do not express an opinion on the manner in which the amounts were derived in the items referred to above. In connection with the procedures referred to above, no matters came to our attention that cause us to believe that the chief financial officer's letter and supporting information should be adjusted.

Signature

Date

APPENDIX B-6.4.1

**SAMPLE SCHEDULE RECONCILING AMOUNTS CONTAINED IN
CFO's LETTER WITH AMOUNTS IN FINANCIAL STATEMENTS**

This illustrates the form of schedule that is contemplated. Details and reconciling items will differ in specific situations.

**XYZ COMPANY
YEAR ENDED DECEMBER 31, 20XX**

<u>Line Number in CFO's Letter</u>	<u>Per Financial Statements</u>	<u>Recon- ciling Items</u>	<u>Per CFO's Letter</u>
Total current liabilities	X		
Long-term debt	X		
Deferred income taxes	<u>X</u>		
	XX		
Accrued decommissioning costs included in current liabilities	X		
Total liabilities (less accrued decommissioning costs)	X		
Net worth	XX		
Less: Cost in excess of value of tangible assets acquired	<u>X</u>		
	X		
Accrued decommissioning costs included in current liabilities	X		
Tangible net worth (plus decommissioning costs)	XX		

(Balance of schedule is not illustrated.)

APPENDIX B-6.5
SAMPLE PARENT COMPANY GUARANTEE

PARENT COMPANY GUARANTEE

Guarantee made this [date] by [name of guaranteeing entity] a [insert “proprietorship,” “joint venture,” “partnership,” or “corporation”] organized under the laws of the State of [insert name of State], herein referred to as “guarantor,” to our subsidiary [licensee] of [business address], obligee.

Recitals

1. The guarantor has full authority and capacity to enter into this guarantee [if guarantor is a corporation, add the following phrase “under its bylaws, articles of incorporation, and the laws of the State of [insert guarantor’s state of incorporation], its State of incorporation”]. [If the guarantor has a Board of Directors, insert the following: “Guarantor has approval from its Board of Directors to enter into this guarantee.”]
2. This guarantee is being issued so that [the licensee] will be in compliance with regulations issued by the Nuclear Regulatory Commission (NRC), an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974. The NRC has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part 50, which require that a holder of, or an applicant for, a license issued pursuant to 10 CFR Part 50 provide assurance that funds will be available when needed for required decommissioning activities.
3. This guarantee is issued to provide financial assurance for decommissioning activities for [identify licensed facility(ies)] as required by 10 CFR Part 50. The decommissioning costs and guarantee amount for which are as follows: [insert amount of decommissioning cost guaranteed for each identified facility].
4. The guarantor meets or exceeds the following financial test criteria [insert statement indicating which financial test is being used] and agrees to notify [the licensee] and the NRC of any changes in its ability to meet the criteria in compliance with the notification requirements as specified in 10 CFR Part 50.

The guarantor meets one of the following two financial tests:

- (a)(i) A current rating of its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as rated by Moody's; and
- (ii) Tangible net worth is at least \$10 million and at least six times the current decommissioning cost estimate or guarantee amount (or prescribed amount if a certification is used); and

- (iii) Assets located in the United States amounting to at least 90 percent of its total assets or at least six times the current decommissioning cost or guarantee amount (or prescribed amount if certification is used). or
- (b)(i) Net working capital and tangible net worth each at least six times the current decommissioning cost estimates or guarantee amounts (or prescribed amount if certification is used); and
 - (ii) Assets located in the United States amounting to at least 90 percent of its total assets or at least six times the amount of the current decommissioning cost estimates or guarantee amounts (or prescribed amount if certification is used); and
 - (iii) Meets two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities that is greater than 0.1; and a ratio of current assets to current liabilities that is greater than 1.5; and
 - (iv) Tangible net worth of at least \$10 million.
- 5. The guarantor has majority control of the voting stock for the following licensee(s) covered by this guarantee. (List for each licensee: name, address, the facility(ies) owned or operated by each licensee, and the corresponding license number(s).]
- 6. Decommissioning activities as used below refers to the activities required by 10 CFR Part 50 for decommissioning of facility(ies) identified above.
- 7. For value received from [licensees] (if the guarantor is a corporation, add “and pursuant to the authority conferred upon the guarantor by (“the unanimous resolution of its directors” or “the majority vote of its shareholders”), a certified copy of which is attached”), the guarantor guarantees that if the licensee fails to perform the required decommissioning activities, as required by License No. [insert license number], due to lack of funds, the guarantor shall
 - (a) provide all funds necessary, up to the amount of this guarantee [in 20__ dollars and as adjusted for inflation], to carry out the required activities, or
 - (b) set up a trust fund in favor of [the licensee] in the amount of these current cost estimates or guarantee amount for these activities.
- 8. The guarantor agrees to submit revised financial statements, financial test data, and a special auditor’s report and reconciling schedule to the NRC annually within 90 days of the close of the parent guarantor's fiscal year.
- 9. The guarantor and the licensee agree that if the guarantor fails to meet the financial test criteria at any time after this guarantee is established, the guarantor and the licensee shall send, within 90 days of the end of the fiscal year in which the guarantor fails to meet the financial test criteria, by certified mail, notice to the NRC. If [the licensee] fails to provide alternative financial assurance as specified in 10 CFR Part 50, as applicable, and obtain

written approval of such assurance from the NRC within 180 days of the end of such fiscal year, the guarantor shall provide such alternative financial assurance in the name of [licensee] or make full payment under the guarantee to a standby trust established by [licensee].

10. Independent of any notification under paragraph 8 above, if the NRC determines for any reason that the guarantor no longer meets the financial test criteria or that it is disallowed from continuing as a guarantor for the facility under License No. [insert license number], the guarantor agrees that within 90 days after being notified by the NRC of such determination, an alternative financial assurance mechanism as specified in 10 CFR Part 50 as applicable, shall be established by the guarantor in the name of [licensee] unless [licensee] has done so.
11. The guarantor as well as its successors and assigns shall remain bound jointly and severally under this guarantee notwithstanding any or all of the following: amendment or modification of license or NRC-approved decommissioning funding plan for that facility, the extension or reduction of the time of performance of required activities, or any other modification or alteration of an obligation of the licensee pursuant to 10 CFR Part 50.
12. The guarantor agrees that it will be liable for all litigation costs incurred by [the licensee] or the NRC in any successful effort to enforce the agreement against the guarantor.
13. The guarantor agrees to remain bound under this guarantee for as long as [licensee] must comply with the applicable financial assurance requirements of 10 CFR Part 50, for the previously listed facility(ies), except that the guarantor may cancel this guarantee by sending notice by certified mail to the NRC and to [licensee], such cancellation to become effective no earlier than 120 days after receipt of such notice by both the NRC and [licensee] as evidenced by the return receipts. If the licensee fails to provide alternative financial assurance as specified in 10 CFR Part 50, as applicable, and obtain written approval of such assurance within 120 days after the sending of the above notice by the guarantor, the guarantor shall provide such alternative financial assurance.
14. The guarantor expressly waives notice of acceptance of this guarantee by the NRC or by [licensee]. The guarantor also expressly waives notice of amendments or modification of the decommissioning requirements and of amendments or modifications of the license.

15. If the guarantor files financial reports with the U.S. Securities and Exchange Commission, then it shall promptly submit them to the NRC during each year in which this guarantee is in effect.

I hereby certify that this guarantee is true and correct to the best of my knowledge.

Effective date: _____

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary: _____

[Name of licensee]

[Authorized signature for licensee]

[Title of person signing]

Signature of witness or notary: _____

VALUE/IMPACT STATEMENT

A draft value/impact statement was published with the initial draft of this guide, DG-1106, when the draft guide was published for public comment in May 1989. No changes were necessary when the guide was published in its final form in August 1990, so a separate value/impact statement for the final guide was not prepared. However, a draft regulatory impact analysis has been published for public comment on the corresponding proposed rule on Decommissioning Trust Provisions, which includes the impacts of this revised guide as well. The analysis examines the costs and benefits of the alternatives considered by the NRC. The draft analysis is available for inspection in the NRC Public Document Room, 11555 Rockville Pike, Rockville, MD. Single copies of the analysis may be obtained from Brian J. Richter, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-1978, e-mail bjr@nrc.gov.