

Section 3

DRAFT SUPPORTING STATEMENT  
FOR  
DECOMMISSIONING REQUIREMENTS

10 CFR 50.33, 50.33(k)(1), 50.33(k)(2), 50.75, 50.75(b), 50.75(d), 50.75(e), 50.75(e)(1)(i), 50.75(e)(1)(ii), 50.75(f)(1), 50.75(f)(2), 50.75(f)(3), 50.75(f)(4), 50.75(g), 50.75(h)(1), 50.75(h)(1)(i), 50.75(h)(1)(ii), 50.75(h)(1)(iii), 50.75(h)(1)(iv), 50.75(h)(2), 50.75(h)(3), 50.80, 50.82, 50.82(a)(1)(i), 50.82(a)(1)(ii), 50.82(a)(4)(i), 50.82(a)(7), 50.82(a)(8)(ii), 50.82(a)(8)(iii), 50.82(a)(8)(iv), 50.82(a)(9), 50.82(a)(9)(ii)(A)-(G), 50.82(b)(1), 50.82(b)(2) and 50.82(b)(4)

DESCRIPTION OF THE INFORMATION COLLECTION

The decommissioning regulations specify requirements for financial assurance, recordkeeping for decommissioning planning, and license transfer and termination procedures. These regulations ensure that decommissioning of production and utilization facilities will be handled by the licensee in a way that will result in minimal or negligible impact on public health and safety and the environment. These regulations affect 104 licensees for operating nuclear power plants and 33 licensees for operating research & test reactors. They also affect licensees for 15 power plants and 7 research & test reactors that are currently being decommissioned, and 9 research & test reactors that currently have possession-only licenses.

A. JUSTIFICATION

1. Need and Practical Utility for the Collection of Information

The provisions of the decommissioning regulations encompass requirements with respect to maintenance of records, submittal, and updating as necessary of financial information, either as a certification or plan and submittal of decommissioning plans.

10 CFR 50.33 Contents of applications; general information.

10 CFR 50.33(k)(1) requires that an application for an operating license include information on how reasonable assurance will be provided that funds will be available to decommission the facility. (Although there are expected to be up to 19 potential combined construction and operation license (COL) applications during the clearance period, NRC staff believes that the financial qualifications requirements of a Part 50 or Part 52 license application will not be filed by an applicant until after the clearance period.)

10 CFR 50.33(k)(2) required holders of operating licenses to provide the above information by July 26, 1990. This information has been supplied.

10 CFR 50.75 Reporting and recordkeeping for decommissioning planning.

10 CFR 50.75 establishes detailed information on what the NRC will accept as reasonable assurance that decommissioning funds will be available when needed.

10 CFR 50.75(b) requires each power reactor applicant for, or holder of, an operating license to submit a decommissioning report, as required by 10 CFR 50.33(k), containing a cost estimate for decommissioning and a certification that financial assurance for decommissioning will be provided and adjusted annually. As part of the certification, a copy of the financial instrument must be submitted to NRC.

10 CFR 50.75(d) requires each research and test reactors applicant for, or holder of, an operating license to submit a decommissioning report as required by 10 CFR 50.33(k) containing a cost estimate for decommissioning, an indication of the method(s) to be used to provide decommissioning funds, and a description of the means of adjusting the cost estimate over the life of the facility.

10 CFR 50.75(e) specifies that a trust to ensure funds are available for decommissioning must be an external trust fund held 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.

10 CFR 50.75(e)(1)(i) requires that the 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 government agency or an entity whose operations in which the prepayment deposit is managed or regulated and examined by a Federal or State agency.

10 CFR 50.75(e)(1)(ii) requires the 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 governmental agency, or an entity whose operations in which the external sinking fund is managed and examined by a Federal or State agency.

10 CFR 50.75(f)(1) requires 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. 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); 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; any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report; and any material changes to trust agreements. Any licensee for a plant that is within 5 years of the projected end of its operation, or where conditions have changed such that it has or will close within 5 years (before the end of its licensed life), or for plants involved in mergers or acquisitions shall submit this report annually.

10 CFR 50.75(f)(2) requires that each power reactor licensee submit, at or about 5 years prior to the projected end of operations, a preliminary decommissioning cost estimate which includes an up-to-date assessment of the major factors that

could affect the cost to decommission.

10 CFR 50.75(f)(3) requires that each research and test reactor licensee submit, at or about 2 years prior to the projected end of operations, a preliminary decommissioning plan containing a cost estimate for decommissioning and an up-to-date assessment of the major factors that could affect planning for decommissioning.

10 CFR 50.75(f)(4) requires, if necessary, the cost estimate for power and research and test reactors to include plans for adjusting funding levels to demonstrate that a reasonable level of assurance will be provided that funds will be available when needed to cover the cost of decommissioning.

10 CFR 50.75(g) requires each licensee to keep records of information important to safe and effective decommissioning until the license is terminated. This information consists of records of spills; as-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used or stored, and of locations of possible inaccessible contamination; records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning; and of the funding method used.

10 CFR 50.75(h)(1), requires licensees that are not electric utilities as defined in 10 CFR 50.2 that use prepayment or an external sinking fund to provide financial assurance to include in the terms of the arrangements governing the trust, escrow account, or government fund, used to segregate and manage the funds, the following:

10 CFR 50.75(h)(1)(i) requires 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 of 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 December 24, 2002, 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.

10 CFR 50.75(h)(1)(ii) requires that 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.

10 CFR 50.75(h)(1)(iii) requires 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 NRC Director, Office of

Nuclear Reactor Regulation (NRR), or the NRC Director, Office of Nuclear Material Safety and Safeguards (NMSS), 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, NRR, or the Director, NMSS, as applicable, within the notice period.

10 CFR 50.75(h)(1)(iv) requires 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 to the Director, NRR, or the Director, NMSS, 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, account, or Government fund, does not receive written notice of objection from the Director, NRR, or the Director, NMSS, 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.

10 CFR 50.75(h)(2) requires licensees that are "electric utilities" under 10 CFR 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, NRR, or the Director, NMSS, 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, NRR or the Director, NMSS, 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 and other incidental expenses of the fund 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.

10 CFR 50.75(h)(3) requires that a licensee that is not an "electric utility" under 10 CFR 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 10 CFR 50(h)(1)(i), (ii), (iii), and (iv) of this section.

#### 10 CFR 50.80 Transfer of licenses.

10 CFR 50.80(b), transfer of licenses, shall include as much of the information described in 10 CFR 50.33 and 10 CFR 50.34 with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license. This would include information on decommissioning funding.

#### 10 CFR 50.82 Termination of license.

10 CFR 50.82 defines the decommissioning process and information collection requirements for power and research and test reactors. Specifically:

10 CFR 50.82(a)(1)(i) and (ii) requires that a power reactor licensee submit written certification to the NRC after determination to permanently cease operation, in accordance with 10 CFR 50.4(b)(8), and once fuel has been permanently removed from the reactor vessel, in accordance with 10 CFR 50.4(b)(9).

10 CFR 50.82(a)(4)(i) requires that a power reactor licensee submit prior to, or within 2 years following permanent cessation of operations, a post-shutdown decommissioning activities report (PSDAR). The PSDAR is sent to the NRC with a copy to the affected State(s) and provides a description of the planned decommissioning activities along with a schedule for their accomplishment, an estimate of expected costs, and a discussion of whether environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate, previously-issued documents.

10 CFR 50.82(a)(7) requires that a nuclear power licensee notify the NRC in writing, and send a copy to the affected State(s), before performing any decommissioning activity inconsistent with, or making any significant schedule change from, those actions and schedules described in the PSDAR, including changes that significantly increase the decommissioning cost. This notification is necessary to keep the NRC informed of changes in the licensee's planned activities.

10 CFR 50.82(a)(8)(ii) requires that a nuclear power licensee submit to the NRC a site-specific decommissioning cost estimate prior to using any funding in excess of the amounts specified in this section. This submittal is necessary to ensure that the licensee will have enough funding for future decommissioning actions.

10 CFR 50.82(a)(8)(iii) requires that within 2 years following permanent cessation of operations, if not already submitted, a nuclear power licensee shall submit a site-specific decommissioning cost estimate.

10 CFR 50.82(a)(8)(iv) requires licensees to provide a means of adjusting cost estimates and funding levels during decommissioning delays or periods of plant storage.

10 CFR 50.82(a)(9) requires that a power reactor licensee submit an application for termination of license. The application must be accompanied or preceded by a license termination plan and be submitted at least 2 years before termination of the license.

10 CFR 50.82(a)(9)(ii)(A)-(G) prescribes the content of the license termination plan. Items (A), (C), and (D) require the licensee to evaluate the site for radiological hazards, perform suitable decontamination (remediation) activities, and perform a suitable final radiation survey after site decontamination. Item (B) requires the licensee to identify any residual dismantlement activity that remains at the time of license termination plan submittal. Item (E) requires the licensee to identify the end use of the site, if a restricted release is sought by the licensee. Item (F) requires the licensee to provide an updated site-specific estimate of remaining decommissioning costs. Item (G) requires the licensee to submit a supplement to the environmental report that describes any new or significant environmental change associated with the licensee's proposed termination activities.

10 CFR 50.82(b)(1) requires that a non-power reactor licensee that permanently ceases operations must make application for license termination within 2 years following permanent cessation of operations, and in no case later than 1 year prior to expiration of the operating license. Each application must be accompanied or preceded by a proposed decommissioning plan. The contents of the decommissioning plan are specified in 10 CFR 50.82(b)(4).

10 CFR 50.82(b)(2) states for decommissioning plans in which the major dismantlement activities are delayed by first placing the facility in storage, planning for these delayed activities may be less detailed. Updated detailed plans must be submitted and approved prior to the start of these activities.

10 CFR 50.82(b)(4) prescribes the content of decommissioning plans for non-power reactors. This includes (i) the choice of the alternative for decommissioning with a description of activities involved; (ii) a description of the controls and limits on procedures and equipment to protect occupational and public health and safety; (iii) a description of the planned final radiation survey; (iv) an updated cost estimate for the chosen alternative for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and plan for assuring the availability of adequate funds for completion of decommissioning; and (v) a description of technical specifications, quality assurance provisions and physical security plan provisions in place during decommissioning.

## 2. Agency Use of Information

The NRC's Office of Nuclear Reactor Regulation (NRR) is the recipient and reviewer of the biennial decommissioning funding status reports submitted by nuclear power reactor licensees. NRR reviews the submitted information to determine if licensees are accumulating sufficient funds for decommissioning. This

is especially relevant in light of potential changes in the electric utility industry's regulatory environmental and the potential impact on the adequate assurance of decommissioning funds. NRR has received and reviewed three rounds of submittals of these reports to determine the adequacy of decommissioning funding. Licensee requests for trust modification or disbursements from the trust are submitted to the Director of either NRR or the Office of Nuclear Material Safety and Safeguards (NMSS), as applicable, to give the NRC the opportunity to object to the licensee's proposed action.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. However, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

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

5. Effort to Reduce Small Business Burden

Approximately one university will be required to submit a decommissioning plan during the next three years. There is no way to obtain the necessary information and yet reduce the small business burden.

6. Consequences to Federal Programs or Policy Activities if the Collection is Not Conducted or is Conducted Less Frequently

Conduct of decommissioning activities and collection of information concerning them at the required frequency is essential to provide the assurance of protection for the health and safety of the workers and the public.

7. Circumstances which Justify Variation from OMB Guidelines

None.

8. Consultations Outside the NRC

The opportunity for public comment on this information collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential submittals are not anticipated. However, confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b).

11. Justification for Sensitive Questions

The provisions of decommissioning regulations do not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

See the enclosed tables.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be .0004 percent of the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be \$861 (9,915.5 hours x \$217 x .0004).

14. Estimated Annualized Cost to the Federal Government

See the enclosed table. This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 10 CFR 171.

15. Reasons for Changes in Burden or Cost

There is no change in burden. The increase in cost is due to the change in the rate from \$156/hour to \$217/hour.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the *Code of Federal Regulations* to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Annual Burden for Licensees and the NRC - Decommissioning Reports, Records and Plans Reporting

Requirement	Reactor type	Licensee burden per response	Number of annual responses	Total annual licensee burden	NRC burden per response	Total NRC annual burden	(Notes)
50.33(k)(1)	Power	200 hrs.	0	0	24 hrs	0	note 1
50.33(k)(1)	Research	72 hrs.	0	0	32 hrs	0	note 2
50.33(k)(2)	Power	Complete					note 3
50.75(f)(1)	Power	5 hrs	69	345 hrs	1 hr	69 hrs	note 9
50.75(f)(2)&(4)	Power	250 hrs	0	0	16 hrs	0	note 4
50.75(f)(3)&(4)	Research	16 hrs	1/3	5.30 hrs	2 hrs	.66 hrs	note 5
50.75(h)(1)(iii)	Power	8	50	400 hrs	8 hrs	400 hrs	
50.75(h)(1)(iv)	Power	8	1	8 hrs	8 hrs	8 hrs	
50.82(a)(1-8)	Power	1,000 hrs	1	1,000 hrs	400 hrs	400 hrs	note 6
50.82(a)(9)	Power	500 hrs	1	500 hrs	200 hrs	200 hrs	note 7
50.82(b)(1)-(4)	Research	400 hrs	1	400 hrs	200 hrs	200 hrs	note 8
<b>Totals:</b>			<b>123.3</b>	<b>2,658.3 hrs</b>		<b>1277.66 hrs</b>	

- note 1: Assumes no power reactor decommissioning financial qualifications required during 3-year period 2/2007 - 01/2010.
- note 2: Assumes no new research reactor license applications.
- note 3: Completed in 1990 for all power and research reactors.
- note 4: Assumes no power reactor licenses will expire requiring preliminary decommissioning cost estimate in the 3-year period.
- note 5: Assumes 1 research reactor license expires during 3-year period.
- note 6: Assumes 3 power reactor PSDARs during the 3-year period.
- note 7: Assumes 1 partial site license termination plan (i.e., reduction in the licensed site area) per year during the 3-year period.
- note 8: Assumes 1 research reactor decommissioning plan per year during 3-year period.
- note 9: Reporting decommissioning trust fund status every 2 years; assume 5 hrs for each licensee to prepare and 1 hr for NRC to review.

Annual Burden for Licensees and the NRC - Decommissioning Reports, Records and Plans  
Recordkeeping

Requirement	Reactor type	Hours per recordkeeper	Number of recordkeepers	Licensee annual burden per recordkeeper	NRC burden per recordkeeper	Total NRC annual burden	(Notes)
50.75(b)	Power	20 hrs	104	2,080 hrs	0	0	note 1
50.75(d)	Research	2 hrs	37	74 hrs	0	0	note 2
50.75(e)(1)(i) and (ii)	Power	8 hrs 80 hrs	50 50	400 hrs 4,000 hrs	3 hrs	150 hrs	
50.75(g)	Power	23 hrs	123	2,829 hrs	0	0	
50.75(g)	Research	2.5 hrs	53	132.5 hrs	0	0	
50.75(h)(1)	Power	20 hrs	20	400 hrs			note 3
50.75(h)(3)	Power			Included in 50.75(h)(1)(iii-iv)			
<b>Totals:</b>			175	9,915.5 hrs		150 hrs	

Total Annual Burden:

Licensee: 12,573.8 hours (2,658.3 + 9,915.5 hours)  
NRC: 1,427.7 hours (1,277.66 + 150 hours)

Total Annual Cost:

Licensee: \$2,728,515 (12,573.8 x \$217)  
NRC: \$309,811 (1,427.7 hours x \$217)

note 1: Annual updating of decommissioning costs for all power reactors.  
note 2: Annual updating of decommissioning costs for all research reactors.  
note 3: Impact on 50.80(b)