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**DRAFT REGULATORY GUIDE DG-3014  
(Proposed Revision 1 to Regulatory Guide 3.66)**

**STANDARD FORMAT AND CONTENT  
OF FINANCIAL ASSURANCE MECHANISMS REQUIRED FOR  
DECOMMISSIONING UNDER 10 CFR PARTS 30, 40, 70, AND 72**

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This regulatory guide is being issued in draft form to involve the public in the early stages of the development of a regulatory position in this area. It has not received complete staff approval and does not represent an official NRC staff position.

Public comments are being solicited on the draft guide (including any implementation schedule) and its associated regulatory analysis or value/impact statement. Comments should be accompanied by appropriate supporting data. Written comments may be submitted to the Rules and Directives Branch, Office of Administration, DAS, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Copies of comments received may be examined at the NRC

Public Document Room, 2120 L Street NW., Washington, DC. Comments will be most helpful if received by **September 30, 1999.**

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# 1. INTRODUCTION

The NRC's requirements for financial assurance for materials licensees are in § 30.35 of 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"; § 40.36 of 10 CFR Part 40, "Domestic Licensing of Source Material"; § 70.25 of 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material"; and § 72.30 of 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste."

This regulatory guide is being developed to provide guidance to NRC licensees and applicants on how to demonstrate financial assurance for decommissioning. The guide also establishes a standard format for presenting the information to the NRC that will (1) aid the licensee or applicant in ensuring that the information is complete, (2) help ensure that applicable requirements in 10 CFR Parts 30, 40, 70, and 72 have been met, and (3) help achieve the intent of the regulations, which is to ensure that the decommissioning of all licensed facilities will be accomplished in a safe and timely manner and that licensees will provide adequate funds to cover all costs associated with decommissioning.

Other documents also address the decommissioning financial assurance requirement. Guidance on uranium recovery facilities under Part 40 is provided in "Technical Position on Financial Assurances for Reclamation, Decommissioning, and Long-Term Surveillance and Control of Uranium Recovery Facilities" dated October 1998. Information on low-level waste disposal facilities under 10 CFR Part 61 is provided in Revision 1 of NUREG-1199, "Standard Format and Content of a License Application for a Low-Level Radiative Waste Disposal Facility"<sup>1</sup> (January 1988), and Revision 3 of NUREG-1200, "Standard Review Plan for the Review of a License Application for a Low-Level Radioactive Waste Disposal Facility"<sup>1</sup> (March 1994).

Note that throughout this regulatory guide, the term "licensee" refers to both licensees and license applicants. This guide uses the terms "financial instrument," "financial mechanism," and "financial assurance mechanism" interchangeably.

Regulatory guides are issued to describe to the public methods acceptable to the NRC staff for implementing specific parts of the NRC's regulations, to explain techniques used by the staff in evaluating specific problems or postulated accidents, and to provide guidance to applicants. Regulatory guides are not substitutes for regulations, and compliance with regulatory guides is not required. Regulatory guides are issued in draft form for public comment to involve the public in developing the regulatory positions. Draft regulatory guides have not received complete staff review; they therefore do not represent official NRC staff positions.

The information collections contained in this draft regulatory guide are covered by the requirements of 10 CFR Parts 30, 40, 70, and 72, which were approved by the Office of Management and Budget, approval numbers 3150-0017, 3150-0020, 3150-0009, and 3150-0132, respectively. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

## 1.1 HOW TO USE THIS REGULATORY GUIDE

This guidance pertains to the various components of a financial assurance demonstration, e.g., the cost estimate, the financial instrument. Each component is addressed briefly in this introduction and then is addressed again in greater detail in its own section. Each subsequent section provides narrative

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<sup>1</sup>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. Copies are available for inspection or copying for a fee from the NRC Public Document Room at 2120 L Street NW., Washington, DC; the PDR's mailing address is Mail Stop LL-6, Washington, DC 20555; telephone (202)634-3273; fax (202)634-3343.

guidance on a particular component and contains one or more checklists to help guide the reader. By completing the tasks on the checklists, a licensee or applicant can be sure that its financial assurance demonstration is complete and likely to be acceptable to the NRC.

Licensees and applicants should read this Section 1 in its entirety. It includes a “master” checklist that directs the reader to other relevant sections and checklists in this regulatory guide. To prepare a financial assurance demonstration that is likely to be acceptable to the NRC, a licensee or applicant should simply complete the following steps.

1. Complete Checklist 1 (the master checklist);
2. Complete applicable checklists called for by Checklist 1;
3. Prepare any documentation called for in the completed checklists; and
4. Submit the completed checklists and accompanying documentation to the NRC for review and approval.

To help licensees and applicants make the initial decisions called for in Checklist 1, this Section 1 discusses each of the three major decision points:

- C Confirmation that financial assurance is required (see Section 1.2)
- C Use of a Certification or a Decommissioning Funding Plan (see Section 1.3)
- C Selection of a financial instrument (see Section 1.4)

Finally, the section also explains applicable recordkeeping requirements (see Section 1.5) and provides guidance for licensees who wish to cancel, replace, or transfer their financial assurance mechanisms (see Section 1.6).

## **1.2 WHEN FINANCIAL ASSURANCE IS REQUIRED**

The NRC’s financial assurance requirements apply only to licensees authorized to possess or use certain quantities and types of licensed materials. The minimum possession or use thresholds that trigger the requirements vary, depending on the type of license and the types and quantities of materials authorized under the particular license. Licensees authorized to possess only a single isotope may use the



determine whether financial assurance is required for a given activity level. Any license that authorizes the possession or use of types or quantities of materials exceeding these thresholds is subject to NRC's decommissioning financial assurance requirements. Note that the relevant quantities and types of materials are those authorized under a particular license, even if a licensee does not currently or usually possess or use these same quantities and types of materials.

<u>Type of License</u>	<u>Minimum License Threshold Requiring Financial Assurance</u>
<b>PART 30</b>	<p><i>Unsealed byproduct material with a half-life greater than 120 days in amounts greater than <math>10^3</math> times the applicable quantities of Appendix B to Part 30 (reproduced as Appendix B to this guide) or, for a combination of isotopes, if R divided by <math>10^3</math> is greater than 1 when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to Part 30</i></p> <p><i>or</i></p> <p><i>Sealed sources or plated foils with a half-life greater than 120 days in amounts greater than <math>10^{10}</math> times the applicable quantities of Appendix B to Part 30 (reproduced as Appendix B to this guide) or, for a combination of isotopes, if R divided by <math>10^{10}</math> is greater than 1 when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to Part 30</i></p>
<b>PART 40</b>	<i>Source material in a readily dispersible form exceeding 10 millicuries (mCi)</i>
<b>PART 70</b>	<i>Unsealed special nuclear material in amounts greater than <math>10^3</math> times the applicable quantities of Appendix B to Part 30 (reproduced as Appendix B to this guide) or, for a combination of isotopes, if R divided by <math>10^3</math> is greater than 1 where R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to Part 30</i>
<b>PART 72</b>	<i>Any amount of spent fuel or high-level radioactive waste</i>

Licensees who exceed the minimum thresholds outlined above are required to demonstrate financial assurance that is acceptable to the NRC until decommissioning has been completed and the license has been terminated. License applicants must have financial assurance in place prior to the receipt of licensed materials.

### 1.3 CERTIFICATION OR DECOMMISSIONING FUNDING PLAN

If financial assurance is required for a particular license (as discussed in Section 1.2), a licensee must decide whether to use a certification of financial assurance or a decommissioning funding plan (DFP), the only two options for demonstrating financial assurance.

**CERTIFICATION** A certification of financial assurance is a financial assurance demonstration that is based on one or more of the three amounts prescribed by regulation -- \$75,000, \$150,000, and \$750,000. Only licensees that are not required to use a DFP may use a certification, as discussed below. The certification amount specified in the regulation is the required level of financial assurance coverage for a license who uses a certification.

**DFP** A decommissioning funding plan (DFP) is a financial assurance demonstration that is based on a site-specific cost estimate for decommissioning the licensed facility. Any licensee may use a DFP, but certain licensees *must* use a DFP, as discussed

below. The amount of the facility-specific cost estimate is the required level of financial assurance coverage for the licensee who uses a DFP.

Licensees may be *required* to prepare a DFP rather than a certification depending on the type of license and the types and quantities of materials authorized under the particular license. Any license authorizing the possession or use of types or quantities of materials exceeding the following thresholds must use a DFP.<sup>2</sup> Note that the relevant quantities and types of materials are those authorized under a particular license, even if a licensee does not currently or usually possess or use these same quantities and types of materials. Licensees whose possession limits are stated in general terms (e.g., up to 1 Ci of any nuclide having an atomic number from 1 to 83) should submit a decommissioning funding plan or commit to limiting material quantities below the applicable financial assurance thresholds.

<b><u>Type of License</u></b>	<b><u>Minimum License Threshold Requiring Use of a DFP</u></b>
<b>PART 30</b>	<i>Unsealed byproduct material with a half-life greater than 120 days in amounts greater than <math>10^5</math> times the applicable quantities of Appendix B to Part 30 (reproduced as Appendix B to this guide) or, for a combination of isotopes, if R divided by <math>10^5</math> is greater than 1 when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to Part 30</i>
<b>PART 40</b>	<i>Source material in a readily dispersible form exceeding 100 mCi</i>
<b>PART 70</b>	<i>Unsealed special nuclear material in amounts greater than <math>10^5</math> times the applicable quantities of Appendix B to Part 30 (reproduced as Appendix B to this guide) or, for a combination of isotopes, if R divided by <math>10^5</math> is greater than 1 where R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to Part 30</i>
<b>PART 72</b>	<i>Any amount of spent fuel or high-level radioactive waste</i>

Licensees who do *not* exceed the thresholds outlined above may use *either* a certification or a DFP. Such licensees may wish to elect use of a DFP if, for example, they wish to obtain the optimal amount of financial assurance, or because use of a site-specific cost estimate may result in a lower financial assurance coverage requirement than would use of a certification (as could happen if a single facility holds multiple licenses, each of which triggers its own certification amount).

- ' Licensees who elect to use certifications of financial assurance should refer to Section 2 of this guide for applicable guidance. Complete Checklist 2 (in Section 2) if using a certification.
- ' Licensees who use DFPs should refer to Section 3 for applicable guidance. Complete Checklist 3 (in Section 3) if using a DFP.

## **1.4 SELECTION OF FINANCIAL INSTRUMENT**

The second major decision that a licensee must make is to identify the type of financial instrument it will use to demonstrate financial assurance. The choice of financial instrument typically depends on a number of factors, including the availability of the instrument to the licensee (i.e., whether or not the licensee is capable of obtaining it), the time and difficulty associated with establishing the instrument, the cost of the instrument, and the expected amount of time remaining before decommissioning. Because these factors can differ for different licensees, each licensee will have to identify the financial instrument that best meets its particular needs.

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<sup>2</sup> Licensees who are authorized to possess only a single isotope may use the table in Appendix A to this guide to determine whether a DFP is required for a given activity level.

NRC regulations specify 13 allowable types of financial instruments that fall into one of four “methods.”

### **Summary of NRC Experience**

NRC’s experience to date is that the vast majority of licensees (on the order of 70 percent) have used a parent company guarantee, self-guarantee, letter of credit, or surety bond. Trust funds also have been used to a lesser extent, as have escrow accounts. In contrast, very few licensees have used government funds, deposits of government securities, lines of credit, insurance, or external sinking funds.

#### **1.4.1 Method 1: Prepayment**

Under *prepayment*, the licensee provides advance decommissioning funding in full (i.e., in the amount of the applicable certification or in the amount of the facility-specific cost estimate) using an account segregated from licensee assets and outside the licensee’s administrative control. Licensees who use prepayment mechanisms generally will not need to provide additional funds at the time of decommissioning unless decommissioning costs exceed the amount of financial assurance provided. Prior to decommissioning, the funds placed in

prepayment instruments can be expected to generate earnings. These earnings are payable to the licensee as long as adequate funds remain in the financial mechanism. Upon completion of decommissioning, any funds remaining in the prepayment mechanism are returned to the licensee. Prepayment instruments include the following:

#### **TRUST**

A **trust** is analogous to a special bank account that is administered by a “trustee.” Trusts can be readily established using an appropriately qualified financial institution as the trustee. Trustee fees are typically taken from the earnings on the trust.

- Licensees who elect to use a trust fund should refer to Section 4 for applicable guidance.

- Licensees who use a trust should complete Checklist 4-A (in Section 4).

#### **ESCROW**

An **escrow** is similar to a trust for practical purposes. Escrows must be established with a financial institution serving as the “escrow agent.” Escrow fees are similar to those associated with trusts, and are also frequently taken from the earnings on the account. Despite the similarities between escrows and trusts, NRC’s past experience is that escrows have been less likely than trusts to be approved quickly by NRC (primarily because of unacceptable provisions that are sometimes added by the drafters of escrow agreements).

- Licensees who elect to use an escrow account should refer to Section 5 for applicable guidance.

- Licensees who use an escrow account should complete Checklist 5-A (in Section 5).

#### **GOVERNMENT FUND**

A **government fund** is simply a trust fund or escrow account for which a State is acting as trustee or escrow agent.

- Licensees who elect to use a government fund should refer to Section 6 for applicable guidance.

- Licensees who use a government fund should complete Checklist 6-A (in Section 6).

**CERTIFICATE OF DEPOSIT**

A **certificate of deposit (CD)** is a deposit of cash by a licensee into a bank for a pre-specified period of time. CDs must be accompanied by a trust, escrow, or government fund.

' Licensees who elect to use a CD should refer to Section 7 for applicable guidance.

' Licensees who use a CD should complete Checklist 7-A (in Section 7).

**DEPOSIT OF GOVERNMENT SECURITIES**

A **deposit of government securities** is the deposit by a licensee (into an accompanying trust fund, escrow account, or government fund) of securities backed by the Federal government or a State or local government.

' Licensees who elect to use a deposit of government securities should refer to Section 8 for applicable guidance.

' Licensees who use a deposit of government securities should complete Checklist 8-A (in Section 8).

**1.4.2 Method 2: Surety, Insurance, or Guarantee**

Under this method, an entity with adequate financial strength (e.g., a surety, bank, or insurer) guarantees that the required amount of funds will be available whenever needed. Unlike prepayment, this method does *not* require the full amount of decommissioning funds to be set aside by the licensee in advance. Instead, the licensee typically pays an annual fee to the provider of the guarantee. Specific surety, insurance, or guarantee instruments include the following:

**SURETY BOND**

A surety bond is a guarantee by a surety company that it will fund decommissioning if the licensee fails to do so. Licensees must pay an annual fee to the surety company to provide the bond and may have to provide substantial collateral, depending on the licensee's financial condition. Surety bonds must be accompanied by a standby trust.

' Licensees who electing to use a surety bond should refer to Section 9 for applicable guidance.

' Licensees who use a surety bond should complete Checklist 9-A.

**LETTER OF CREDIT**

A letter of credit is a formalized line of credit extended by a bank on behalf of a licensee. The credit may be used only to fund decommissioning. As with a surety bond, licensees who use a letter of credit must pay an annual fee to the bank and may have to provide substantial collateral depending on the licensee's financial condition. Letters of credit must be accompanied by a standby trust.

' Licensees who elect to use a letter of credit should refer to Section 10 for applicable guidance.

' Licensees who use a letter of credit should complete Checklist 10-A.

**LINE OF CREDIT**

A line of credit is similar in many respects to a letter of credit. NRC's experience is that lines of credit have been used by licensees very rarely. This is probably because, in order to be acceptable to NRC, a line of credit must be more formalized than is common practice for the banks that provide them.

' Licensees who elect to use a line of credit should refer to Section 11 for applicable guidance.

- ' Licensees who use a line of credit should complete Checklist 11-A.

## **INSURANCE**

An insurance policy is a guarantee by an insurance company that it will fund decommissioning activities, whenever needed, if a licensee does not do so. Insurance must be accompanied by a standby trust. NRC's experience is that insurance has almost never been used by licensees and, when insurance has been used, the submittals usually have not met NRC's acceptance criteria.

- ' Licensees who elect to use insurance should refer to Section 12 for applicable guidance.

- ' Licensees who use insurance should complete Checklist 12-A.

## **PARENT COMPANY GUARANTEE**

A parent company guarantee is a guarantee from a licensee's corporate parent that it will fund or carry out decommissioning activities if the licensee fails to do so. The corporate parent must pass a financial test to demonstrate that it has adequate financial strength to provide the guarantee. The parent company guarantee (because of its very low cost) is usually the financial instrument of choice for licensees with corporate parents willing and able to provide such a guarantee for decommissioning.

- ' Licensees who elect to use a parent company guarantee should refer to Section 13 for applicable guidance.

- ' Licensees who use a parent company guarantee should complete Checklist 13-A.

## **SELF-GUARANTEE**

A self-guarantee is a guarantee by the licensee itself that it will fund and carry out decommissioning activities. The licensee must pass a financial test to demonstrate that it has adequate financial strength to provide the guarantee. Self-guarantees may not be used by licensees that have a corporate parent. Because of its very low cost, a self-guarantee is usually the financial instrument of choice to assure decommissioning for licensees who are able to provide such a guarantee.

- ' Licensees who elect to use a self-guarantee should refer to Section 14 for applicable guidance.

- ' Licensees who use a self-guarantee should complete Checklist 14-A.

### **1.4.3 Method 3: External Sinking Fund**

An external sinking fund allows a licensee to *gradually* prepay for decommissioning by combining the use of a partially funded prepayment instrument (e.g., a trust or escrow) with a surety bond, letter of credit, or insurance covering the unfunded balance. As the licensee gradually funds the prepayment instrument over time, the licensee is allowed to reduce by a corresponding amount the coverage provided by the surety bond, letter of credit, or insurance.

- ' Licensees who elect to use an external sinking fund should refer to Section 15 for applicable guidance.

- ' Licensees who use an external sinking fund should complete Checklist 15-A.

### **1.4.4 Method 4: Statement of Intent**

A statement of intent is a commitment by a Federal, State, or local government licensee to request and obtain decommissioning funds from its funding body when necessary. Because of its very low cost, the statement of intent is usually the financial instrument of choice to assure decommissioning for

government licensees. This method (and instrument) is available only to licensees that are government entities.

- ' Licensees who elect to use a statement of intent should refer to Section 16 for applicable guidance.
- ' Licensees who use a statement of intent should complete Checklist 16-A.

## 1.5 RECORDKEEPING

The recordkeeping requirements for licensees are in 10 CFR 30.35(g), 40.36(f), 70.25(g), and 72.30(d). At a minimum, licensees must keep records of:

- C Spills or other unusual occurrences if contamination remains after any cleanup procedure or if contaminants may have spread to inaccessible areas. These records must include information on nuclides, quantities, forms, and concentrations.
- C As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used or stored.
- C Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, as well as records of the funding methods used for assuring funds.
- C A copy of the financial assurance mechanism and other supporting documentation.

Timely notification should be given to the NRC in the following situations.

- C Any proposed changes, revisions, and adjustments to the underlying cost estimates and to the financial mechanisms, including a change from one mechanism to another.
- C Commencement of bankruptcy action involving the licensee. Written notification of commencement of bankruptcy proceedings is to be submitted, as required by 10 CFR 30.34(h), 40.41(f), 70.32(a)(9), and 72.44(b)(6).

Reports that certifying completion of the activities for which financial assurance is provided must be submitted before the financial assurance mechanism may be canceled.

## 1.6 CANCELING, REPLACING, OR TRANSFERRING FINANCIAL INSTRUMENTS

The financial assurance mechanisms outlined in this regulatory guide are designed so that licensees may not cancel them without NRC approval, even if a replacement instrument is being established. Licensees who wish to cancel their existing financial mechanisms must first submit a replacement to NRC for review and approval or notify NRC that decommissioning has been completed. If a replacement mechanism is provided to NRC for review, the current mechanism will *not* be canceled or released before NRC's review and approval of the replacement mechanism. Licensees should provide NRC with adequate time to review proposed replacement mechanisms. Upon NRC's approval of the replacement mechanism (or termination of the license if decommissioning has been completed), the applicable NRC Branch Chief will stamp the current mechanism "canceled," sign it, and release it to the licensee.

If the license holder is expected to change as a result of a corporate acquisition or divestiture, the licensee must obtain NRC's approval before an existing financial instrument may be transferred or released. If the new license holder intends to establish a new financial instrument to replace the existing one, NRC must approve the replacement before NRC will release the existing mechanism. NRC recommends that the licensee communicate with NRC staff concerning any replacement instrument well in advance (at least 60 days) of the scheduled change in licensee or in corporate ownership.



## 2. CERTIFICATIONS OF FINANCIAL ASSURANCE

A certification of financial assurance is a financial assurance demonstration that is based on one or more of the three amounts prescribed in the regulations -- \$75,000, \$150,000, and \$750,000. For licensees who use certifications, the certification amount specified in the regulations becomes the required level of financial assurance coverage. Only certain licensees may use a certification, however, as discussed below. Licensees who use certifications must undertake the following actions, as summarized in Checklist 2.

- C Determine the appropriate certification amount (see Section 2.1)
- C Prepare a certification statement (see Section 2.2)
- C Submit the required documentation (see Section 2.3)

Licensees using certifications eventually may have to adjust their financial assurance coverage levels (and update their financial instruments) for one of three reasons:

- (1) The NRC may periodically adjust the certification amounts specified in the regulations,
- (2) The licensee may elect to replace the certification with a decommissioning funding plan (DFP), or
- (3) The licensee intends to initiate decommissioning and prepares a decommissioning plan.<sup>3</sup>

Also, regardless of a particular licensee's eligibility to use a certification amount, any licensee may elect instead to use a DFP based on a site-specific cost estimate to determine the required level of financial assurance coverage. Licensees may wish to use a DFP if, for example, they wish to obtain the optimal amount of financial assurance, or because use of certification amounts may overstate a facility's decommissioning costs (as could happen if a single facility holds multiple licenses, each of which triggers its own certification amount). Guidance on preparing DFPs is presented in Section 3 of this regulatory guide.

### 2.1 DETERMINING THE APPROPRIATE CERTIFICATION AMOUNT

Licensees may be eligible to use a particular certification amount depending on the type of license and the types and quantities of materials authorized under the particular license, as summarized below.<sup>4</sup> Note that the relevant quantities and types of materials are

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<sup>3</sup> Certain licensees who notify the NRC that they will terminate activities under their licenses and decommission their facilities must submit *decommissioning plans* (not the same as decommissioning funding plans). The decommissioning plan must contain "an updated detailed cost estimate for decommissioning, a comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning" (10 CFR 30.36(g)(4)(v), 40.42(g)(4)(v), and 70.38(g)(4)(v)).

<sup>4</sup> Licensees authorized to possess only a single isotope may use the table in Appendix A to this guide to determine the appropriate certification amount for a given activity level.



- in amounts greater than  $10^3$  but less than or equal to  $10^4$  times the applicable quantities of Appendix B to 10 CFR Part 30 or
- for a *combination* of isotopes, if R divided by  $10^3$  is greater than 1 but if R divided by  $10^4$  is less than or equal to 1 (when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to 10 CFR Part 30).

C **A certification amount of \$750,000 applies** to Part 30 licensees who are authorized to possess or use unsealed byproduct material in amounts exceeding the limit applicable to the \$150,000 certification amount, as stated above, but

- in amounts greater than  $10^4$  but less than or equal to  $10^5$  times the applicable quantities of Appendix B to 10 CFR Part 30 or
- for a *combination* of isotopes, if R divided by  $10^4$  is greater than 1 but if R divided by  $10^5$  is less than or equal to 1 (when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to Part 30).

C **A certification amount may not be used** for a Part 30 license authorizing the possession or use of byproduct material in amounts exceeding the limit applicable to the \$750,000 certification amount, as stated above. These licensees must prepare DFPs, as discussed in Section 3.

C **No financial assurance is required** (as discussed in Section 1.2) for a Part 30 licensee who is authorized to possess or use (1) unsealed byproduct material in amounts less than or equal to  $10^3$  times the applicable quantities of Appendix B to 10 CFR Part 30 (reproduced as Appendix B to this guide) or, for a combination of isotopes, if R divided by  $10^3$  is less than or equal to 1 when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to Part 30, or (2) sealed sources or plated foils in amounts less than or equal to  $10^{10}$  times the applicable quantities of Appendix B to 10 CFR Part 30 or, for a combination of isotopes, if R divided by  $10^{10}$  is less than or equal to 1 when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to Part 30.

### 2.1.2 Part 40 Certification Amounts

The following applies to the use of certification amounts by Part 40 licensees.

C **A certification amount of \$150,000 applies** to a Part 40 licensee who is authorized to possess or use source material in a readily dispersible form in amounts greater than 10 millicuries (mCi) but less than or equal to 100 mCi.

C **A certification amount may not be used** for Part 40 licensees authorized to possess or use source material in a readily dispersible form in amounts greater than 100 mCi. These licensees must prepare DFPs, as discussed in Section 3.

C **No financial assurance is required** (as discussed in Section 1.2) for Part 40 licensees who are authorized to possess or use source material in a readily dispersible form in amounts less than or equal to 10 mCi.

### 2.1.3 Part 70 Certification Amounts

The following apply to the use of certification amounts by Part 70 licensees.

C **A certification amount of \$150,000 applies** to a Part 70 licensee who is authorized to possess or use unsealed special nuclear material

- in amounts greater than  $10^3$  but less than or equal to  $10^4$  times the applicable quantities of Appendix B to Part 30 (reproduced above) or

- for a *combination* of isotopes, if R divided by  $10^3$  is greater than 1 but if R divided by  $10^4$  is less than or equal to 1 (when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to 10 CFR Part 30).
- C **A certification amount of \$750,000** applies to a Part 70 licensee who is authorized to possess or use unsealed special nuclear material in amounts exceeding the limit applicable to the \$150,000 certification amount, as stated above, but
- in amounts greater than  $10^4$  but less than or equal to  $10^5$  times the applicable quantities of Appendix B to 10 CFR Part 30 or
  - for a *combination* of isotopes, if R divided by  $10^4$  is greater than 1 but if R divided by  $10^5$  is less than or equal to 1 (when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to 10 CFR Part 30).
- C **A certification amount may not be used** for a Part 70 license authorizing the possession or use of unsealed special nuclear material in amounts exceeding the limit applicable to the \$750,000 certification amount, as stated above. These licensees must prepare DFPs, as discussed in Section 3.
- C **No financial assurance is required** (as discussed in Section 1.2) for a Part 70 license authorizing the possession or use of unsealed special nuclear material in amounts less than or equal to  $10^3$  times the applicable quantities of Appendix B to 10 CFR Part 30 or, for a combination of isotopes, if R divided by  $10^3$  is less than or equal to 1 when R is defined as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix B to 10 CFR Part 30. No financial assurance is required for licensees possessing only special nuclear material in sealed form.

#### 2.1.4 Part 72 Certification Amounts

Licensees under Part 72 are not permitted to use certifications of financial assurance. These licensees must prepare DFPs, as discussed in Section 3.

## 2.2 PREPARING THE CERTIFICATION STATEMENT

Licensees who use certifications of financial assurance prepare a *certification statement*. In the certification statement, the licensee certifies that it has obtained financial assurance in the appropriate certification amount and provides the details needed to verify that the certification amount is accurate under NRC regulations. As discussed above, these details include the license type and the types and amounts of materials authorized by the license.

The model wording for certification statements that is presented in this section is acceptable to the NRC staff. Although other wording may also be satisfactory, all certification statements should clearly identify the licensee, the license number, the type of license (e.g., Part 30), the types and amounts of materials authorized by the license (including specific isotopes where applicable), the appropriate certification amount, and a certification that the information presented in the statement is accurate.

## 2.3 SUBMITTING THE REQUIRED DOCUMENTATION

Under NRC's financial assurance regulations, 10 CFR 30.35(b)(2), 40.36(b)(2), and 70.25(b)(2), licensees who use certifications of financial assurance must submit the following to the NRC.

- C The certification statement (as discussed above in Section 2.2) and
- C An *originally signed duplicate* of the financial instruments obtained to provide financial assurance for decommissioning. This regulatory guide describes the allowable financial instruments first in general terms, in Section 1, and then in detail beginning in Section 4.

Licensees should refer to these other sections to ensure that their financial assurance instruments and supporting documentation will be acceptable to the NRC.

In addition to submitting these materials, licensees must maintain records of the amount certified for decommissioning and the funding methods used for assuring funds (e.g., a copy of the instruments and all supporting documentation).

## 2.4 Model Certification Statement

### CERTIFICATION OF FINANCIAL ASSURANCE

Principal: [Legal names and business address of licensee]

NRC license number, name and address of the facility

Issued to: U.S. Nuclear Regulatory Commission

I certify that [insert name of licensee] is licensed to possess the following types of [insert all that apply: “sealed sources or plated foils with a half-life greater than 120 days licensed under 10 CFR Part 30,” “unsealed byproduct material with a half-life greater than 120 days licensed under 10 CFR Part 30,” “source material in a readily dispersible form licensed under 10 CFR Part 40,” and “unsealed special nuclear material licensed under 10 CFR Part 70”] in the following amounts:

Type of Material

Amount of Material

[List materials and quantities of materials noted above. For *byproduct materials* and *special nuclear materials*, list separately the type and amount of *each isotope* authorized by the license.]

I also certify that financial assurance in the amount of [insert “\$75,000,” “\$150,000,” “\$750,000,” or the applicable sum of these amounts] has been obtained for the purpose of decommissioning as prescribed by 10 CFR Part [insert 30, 40, or 70].

[Signatures and titles of officials of institution]

[Corporate seal]

[Date]

### 3. DECOMMISSIONING FUNDING PLANS

A decommissioning funding plan (DFP) is a financial assurance demonstration that is based on a *site-specific cost estimate* for decommissioning the licensed facility. The amount of the facility-specific cost estimate becomes the minimum required level of financial assurance coverage. Any licensee may use a DFP, but certain licensees *must* use a DFP, as discussed in Section 1.

Licensees who use DFPs must undertake the following actions, as summarized in Checklist 3.

- C Prepare a site-specific decommissioning cost estimate (see Section 3.1)
- C Determine the means that will be used to adjust the cost estimate and associated funding levels periodically over the life of the facility (See Section 3.2)
- C Submit the required documentation (see Section 3.3)

#### 3.1 PREPARING THE SITE-SPECIFIC COST ESTIMATE

In evaluating decommissioning cost estimates, the NRC considers the following factors:

- C The completeness of the estimate (i.e., scope),
- C The level of detail presented, and
- C The reasonableness of the estimate (i.e., the accuracy and magnitude of estimated costs).

These factors are discussed briefly below. Sections 3.1.1-3.1.3 outline or describe the three basic parts of a cost estimate: the facility description, the estimated decommissioning costs, and key assumptions. Section 3 concludes with a series of cost estimating tables that can assist licensees in preparing decommissioning cost estimates that are likely to be acceptable to the NRC.

The site-specific cost estimate required for a DFP should represent the licensee's best approximation of all direct and indirect costs of decommissioning its facilities under routine facility conditions. The assumption that routine facility conditions will prevail at the time of decommissioning implies that the cost estimate need not consider a worst-case decommissioning scenario. Similarly, however, the estimate should not be based on a scenario that is more optimistic than would be consistent with routine facility conditions. By way of example, NRC believes it reasonable for decommissioning cost estimates to assume the following:



the adequacy of the estimate. A series of cost estimating tables are provided at the end of this section to assist licensees in preparing decommissioning cost estimates that contain sufficient detail and are likely to be acceptable to NRC. *The NRC staff recommends that licensees pattern their cost estimates after the cost estimating tables presented at the end of this section.*

The labor estimates, material costs, and other factors of the cost estimate should have a clear and reasonable basis. Licensees may wish to consider the use of NRC-provided cost information such as that found in NUREG/CR-1754, "Technology, Safety and Costs of Decommissioning Reference Non-Fuel-Cycle Nuclear Facilities," Addendum 1<sup>1</sup> (October 1989), and other NRC cost estimating references. (Other documents that may help in calculating estimates for decommissioning costs are in the Bibliography of this guide.)

Complete decommissioning cost estimates contain three basic parts:

- (1) A facility description,
- (2) The estimated decommissioning costs (including labor costs, nonlabor costs, and a contingency factor), and
- (3) Key assumptions.

These parts of cost estimates are discussed separately below and have been incorporated into the cost estimating tables at the end of Section 3.

### **3.1.1 Facility Description**

The facility description provides the basic context of the estimate. It should include both general and specific information, including:

- C License number and type,
- C Specific quantities and types of materials authorized by the license (e.g., by specific isotope),
- C General discussion of how licensed materials are used in the licensee's operations,
- C Description of facility buildings, rooms, and grounds, including the number and dimensions of areas (e.g., laboratories) that require decontamination,
- C Number and dimensions of facility components (e.g., fume hoods, glove boxes, laboratory benches, ductwork) that require decontamination,
- C Levels of contamination, and
- C Quantities of materials or waste accumulated prior to shipping or disposal (if applicable).

The facility description should also address any other characteristics of the facility that need to be understood to evaluate the estimated decommissioning costs.

### 3.1.2 Estimated Decommissioning Costs

The cost estimate must account for the costs of all phases of the decommissioning process. The estimate should itemize each of the major decommissioning tasks or activities and should distinguish between labor costs and nonlabor costs, as described in Sections 3.1.2.1 and 3.1.2.2. The estimate should also explicitly incorporate a contingency factor as discussed in Section 3.1.2.3.

#### 3.1.2.1 Labor Costs

Labor costs associated with all decommissioning tasks and activities should include basic wages and benefits for licensee and contractor staff performing decommissioning-related tasks, overhead costs,<sup>6</sup> and contractor profit (if applicable). Labor costs should be broken out by major task or activity, such as:

- C Planning and preparation of the facility and site for decommissioning, including activities such as preparing a detailed decommissioning plan, preparing other State or local documentation, developing work plans, performing staff training, and procuring special equipment,
- C Decontamination or dismantling of radioactive facility components,
- C Restoration of contaminated areas on facility grounds, if necessary,
- C A final radiation survey,
- C Site stabilization and long-term surveillance, if necessary.

The cost estimate should also describe the techniques and methods that will be used to decontaminate facility components because these decontamination methods will impact the amount of labor required. If any of the decommissioning tasks or activities listed above do not apply to a particular facility, the estimate should explain why this is the case.

#### 3.1.2.2 Nonlabor Costs

Non-labor costs also are likely to arise during decommissioning, such as:

- C Packing materials
- C Shipping costs (these could be classified as labor costs for some facilities)
- C Disposal costs

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<sup>6</sup> The term "overhead" typically includes costs that are not directly traceable to any particular product produced or project conducted by the firm. Thus, overhead typically includes "period" costs such as insurance, utilities, rent, supplies, property taxes, depreciation, and the costs of any wages, salaries, and benefits incurred as a result of the corporation's officers and "support staff" (e.g., accounting staff, legal staff, janitorial staff, security staff). To spread such costs across multiple products or projects fairly, firms usually calculate an "indirect" overhead rate that is applied to all direct labor hours (i.e., on those labor hours that are directly associated with particular products or projects). Appendix D of Addendum 1 to NUREG/CR-1754 applies an overhead rate of 50 percent on direct labor for most licensee staff (70 percent for the supervisor), and an overhead rate of 110 percent on direct labor for contractor personnel, for decommissioning activities at six reference facilities. If other rates are used, licensees should provide justification for those rates in the cost estimate.

- C Other equipment and supplies (e.g., personal protective equipment, brushes)
- C Miscellaneous expenses (e.g., license fees, insurance, taxes).

### **3.1.2.3 Contingency Factor**

Because of the uncertainty in waste disposal costs and other costs associated with decommissioning, the cost estimate should apply a contingency factor of 25 percent to the sum of all estimated decommissioning costs. The 25 percent contingency factor helps protect against *unforeseen* decommissioning costs and should not be reduced or eliminated simply because foreseeable costs are low.

### **3.1.3 Key Assumptions (including Salvage Value)**

Key assumptions used in the decommissioning cost estimate should be identified and adequately justified. For example, claims of low levels of contamination should be supported by test results or by adequate discussion of how the licensed materials are used throughout the facility. Unusual items, such as disposal of radioactive materials at zero costs, should be supported by relevant information (e.g., disposal agreements, contracts, or other information). In general, justifications based on “past experience” are likely to be adequate only if the past experience is relevant; therefore, the cost estimate should compare comparable decommissionings with respect to facilities, materials, processes, management, regulatory requirements, and price levels. If cost models are used, the models should be described in enough detail to determine whether they are adequate and appropriate given the characteristics of the facility.

The cost estimate should clearly state that it does not take credit for any *salvage value* that might be realized from the sale of potential assets (e.g., recovered materials or decontaminated equipment) during or after decommissioning. If estimated credits are taken for salvage value but are not fully realized at the time of decommissioning, the cost estimate (as well as the financial assurance) may be significantly low.

## **3.2 DETERMINING THE MEANS FOR ADJUSTING THE COST ESTIMATE**

Licensees who use DFPs must specify the means (i.e., the method and frequency) by which they will periodically adjust their cost estimates and associated funding levels over the life of their facilities. In general, cost estimates should be updated with the current prices of goods and services at least every five years or when the amounts or types of material at the facility change. Adjustments should be made to account for inflation, for other changes in the prices of goods and services, for changes in facility conditions, and for changes in expected decommissioning procedures.

### 3.3 SUBMITTING THE REQUIRED DOCUMENTATION

Under NRC's financial assurance regulations (10 CFR 30.35(e), 40.36(d), 70.25(e), and 72.30(b)), licensees who use DFPs must submit the following to NRC:

- C A site-specific cost estimate for decommissioning (as discussed in Section 3.1),
- C A description of the means that will be used to adjust the site-specific cost estimate and associated funding levels periodically over the life of the facility (as discussed in Section 3.2),
- C A certification by the licensee that financial assurance for decommissioning has been provided in the amount of the decommissioning cost estimate, and
- C An *originally signed duplicate* of the financial instruments that provide financial assurance for decommissioning. This guide describes the allowable financial instruments in general terms in Section 1, and then in detail beginning in Section 4. Licensees should refer to these sections to ensure that their financial assurance instruments and supporting documentation will be acceptable to NRC.

In addition to submitting these materials to NRC, licensees must maintain records of these materials in their files.

### 3.4 Facility Description Summary

NRC license numbers and types (i.e., Part 30, 40, 70, or 72)

Types and quantities of materials authorized under the licenses listed above.

Description of how licensed materials are used.

(Use additional sheets as necessary)

Description of facility, including buildings, rooms, grounds, and description of where particular types of materials are used.

(Use additional sheets as necessary)

Quantities of materials or waste accumulated before shipping or disposal.

(Use additional sheets as necessary)

### 3.5 Number and Dimensions of Facility Components

Use this table to summarize relevant features of the facility. Copy and complete the table as necessary for each room, laboratory, or area. Rooms, laboratories, or areas with similar levels of contamination may be consolidated in one table.

Name of room, laboratory, or area: \_\_\_\_\_

Level of Contamination: \_\_\_\_\_

Component	Number of Components	Dimensions of Component (specify units)	Total Dimensions (specify units)
Glove Boxes			
Fume Hoods			
Lab Benches			
Sinks			
Drains			
Floors			
Walls			
Ceilings			
Ventilation/Ductwork			
Hot Cells			
Equipment/Materials			
Soil Plots			
Storage Tanks			
Storage Areas			
Radwaste Areas			
Scrap Recovery Areas			
Maintenance Shop			
Equipment Decontamination Areas			
Other (specify)			

### 3.6 Planning and Preparation (Work Days)

Estimate the number of work days, by specific labor category, that will be required to complete planning and preparation activities. Include all appropriate labor categories, including Supervisor, Foreman, Craftsman, Technician, Health Physicist, Laborer, Clerical, and others as needed.

Activity	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category
	—	—	—	—	—	—
Preparation of Documentation for Regulatory Agencies						
Submittal of Decommissioning Plan to NRC when required by 10 CFR 30.36(g)(1), 40.42(g)(1), or 70.38(g)(1)						
Development of Work Plans						
Procurement of Special Equipment						
Staff Training						
Characterization of Radiological Condition of the Facility (including soil and tailings analysis or groundwater analysis, if applicable)						
Other (specify)						
TOTALS						

### 3.7 Decontamination or Dismantling of Radioactive Facility Components (Work Days)

Estimate the number of workdays, by specific labor category, that will be required to complete decontamination and/or dismantling activities for each facility component. Copy and complete this table as necessary for each room, laboratory, or area. Rooms, laboratories, or areas with similar levels of contamination may be consolidated in one table.

Name of room, laboratory, or area: \_\_\_\_\_

Level of Contamination: \_\_\_\_\_

Component	Decon. Method	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category
Glove Boxes							
Fume Hoods							
Lab Benches							
Sinks							
Drains							
Floors							
Walls							
Ceilings							
Ventilation/Ductwork							
Hot Cells							
Equipment/Materials							
Soil Plots							
Storage Tanks							
Storage Areas							
Radwaste Areas							
Scrap Recovery Areas							
Maintenance Shop							
Equipment Decontamination Areas							
Other (specify)							
TOTALS							

**3.8 Restoration of Contaminated Areas on Facility Grounds  
(Work Days)**

Estimate the number of work days, by specific labor category, that will be required to restore contaminated areas on facility grounds.

Activity	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category
	_____	_____	_____	_____	_____	_____
Backfill and Restore Site						
TOTALS						

**3.9 Final Radiation Survey  
(Work Days)**

Estimate the number of work days, by specific labor category, that will be required to conduct a final radiation survey.

Activity	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category
	_____	_____	_____	_____	_____	_____
TOTALS						

### 3.10 Site Stabilization and Long-Term Surveillance (Work Days)

Estimate the number of work days, by specific labor category, that will be required to complete site stabilization and long-term surveillance activities.

Activity	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category
TOTALS						

### 3.11 Total Work Days by Labor Category

Enter the total work days estimated for each specific labor category from the applicable table above (i.e., from the bottom rows of Tables 3.6 through 3.10).

Task	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category	Labor Category
Planning and Preparation (TOTALS from Table 3.6)						
Decontamination and/or Dismantling of Radioactive Facility Components (Sum of TOTALS from all copies of Table 3.7)						
Restoration of Contaminated Areas on Facility Grounds (TOTALS from Table 3.8)						
Final Radiation Survey (TOTALS from Table 3.9)						
Site Stabilization and Long- Term Surveillance (TOTALS from Table 3.10)						

### 3.12 Worker Unit Cost Schedule

Estimate labor costs (including salary, fringe benefits, and corporate overhead). Include all appropriate labor categories, including Supervisor, Foreman, Craftsman, Technician, Health Physicist, Laborer, Clerical, and others as needed.

Labor Cost Component	Labor Category					
Salary & Fringe (\$/year)						
Overhead Rate (%)						
Total Cost Per Year						
Total Cost Per Work Day*						

\*Based on \_\_\_\_\_ work days per year (e.g., 260).

### 3.13 Total Labor Costs by Major Decommissioning Task

Multiply the estimated work days for each specific labor category (from Table 3.11) by the total cost per work day for the corresponding labor category (from Table 3.12), and enter the results in the table below. Then, add across all labor categories to determine the total labor costs for each major decommissioning task.

Task	Labor Category	Total Labor Cost					
Planning and Preparation							
Decontamination or Dismantling of Radioactive Facility Components							
Restoration of Contaminated Areas on Facility Grounds							
Final Radiation Survey							
Site Stabilization and Long-Term Surveillance							

### 3.14 Packaging, Shipping, and Disposal of Radioactive Wastes (Excluding Labor Costs)

#### (a) Packing Material Costs

Estimate the types and volumes of waste expected to be generated, along with the number and types of containers required for packaging the waste. Multiply the number of containers required by the unit cost per container.

Waste Type	Volume (m <sup>3</sup> )	Number of Containers	Type of Container	Unit Cost of Container	Total Packaging Costs
TOTAL			-	-	

#### (b) Shipping Costs

Estimate the number of truckloads of waste to be shipped. Multiply shipping costs per mile (including truckload costs, surcharges, and overweight charges) by the total distance shipped.

Waste Type	Number of Truckloads	Unit Cost (\$/mile/truckload)	Surcharges (\$/mile)	Overweight Charges (\$/mile)	Distance Shipped (miles)	Total Shipment Costs
TOTAL		-	-	-	-	

#### (c) Waste Disposal Costs

Estimate the volume of waste to be disposed. Multiply the volume of waste disposed by the unit disposal cost (including any volume-based surcharges). Add any surcharges that are based on the number of containers of waste.

Waste Type	Disposal Volume (m <sup>3</sup> )	Unit Cost (\$/m <sup>3</sup> )	Surcharges (\$/m <sup>3</sup> or \$/container)	Total Disposal Costs
TOTAL		-	-	

**3.15 Equipment/Supply Costs  
(Excluding Containers)**

Estimate the quantity of equipment and supplies required for decommissioning and multiply that quantity by the appropriate unit costs.

<b>Equipment/Supplies</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Equipment/Supply Cost</b>
<b>TOTAL</b>	-	-	

**3.16 Miscellaneous Costs**

Estimate any other applicable costs.

<b>Cost Item</b>	<b>Total Cost</b>
License Fees	
Insurance	
Taxes	
Other (specify)	
<b>TOTAL</b>	

### 3.17 Total Decommissioning Costs

Enter the total costs reported in Tables 3.13, 3.14(a)-(c), 3.15, and 3.16 into the appropriate cells below, and add them to obtain a subtotal. Add to the subtotal a contingency allowance in the amount of 25 percent of the subtotal to obtain the total decommissioning cost estimate.

Task/Component	Total Cost	Percentage of Total Cost
Planning and Preparation (From Table 3.13)		
Decontamination and/or Dismantling of Radioactive Facility Components (From Table 3.13)		
Restoration of Contaminated Areas on Facility Grounds (From Table 3.13)		
Final Radiation Survey (From Table 3.13)		
Site Stabilization and Long-Term Surveillance (From Table 3.13)		
Packing Material Costs (TOTAL from Table 3.14(a))		
Shipping Costs (TOTAL from Table 3.14(b))		
Waste Disposal Costs (TOTAL from Table 3.14(c))		
Equipment/Supply Costs (TOTAL from Table 3.15)		
Miscellaneous Costs (TOTAL from Table 3.16)		
<b>SUBTOTAL</b>		100%
25% Contingency		
<b>TOTAL DECOMMISSIONING COST ESTIMATE</b>		

## 4. TRUST FUNDS

A *trust fund* functions much like a savings account except that (1) monies are legally segregated for a specific purpose and (2) the funds are administered by someone with a fiduciary responsibility to keep or use the property in the fund for the benefit of the beneficiary. A decommissioning trust is governed by an irrevocable, three-party written agreement in which the licensee (called the *grantor* or, less frequently, the trustor or settlor) transfers an amount of cash, securities, or other liquid assets at least equal to the cost of decommissioning to a *trustee*, such as a bank. The trustee manages the fund according to the terms of the written agreement for the benefit of the *beneficiary* (NRC).

The remainder of this section discusses the primary criteria that determine whether particular trust fund submissions will be acceptable to NRC.

- C Section 4.1 describes qualifications required of the issuer (the trustee).
- C Section 4.2 addresses funding and the adequacy of coverage.
- C Section 4.3 discusses the documentation that supports a trust fund.
- C Section 4.4 presents a model trust fund submission that NRC has found to be acceptable.

This section also contains two checklists designed to assist licensees in preparing acceptable decommissioning trusts. Checklist 4-A summarizes the primary criteria used by NRC to evaluate trust funds. Checklist 4-B (which should be used only by licensees who revise or do not use the model wording for trust agreements) presents terms and conditions that are recommended for trust agreements.

### 4.1 QUALIFICATIONS OF THE ISSUER: THE TRUSTEE

The regulations on financial assurance for decommissioning (10 CFR 30.35(f)(2)(ii), 40.36(e)(2)(ii), 70.25(f)(2)(ii), and 72.30(c)(2)(ii)) require that the trustee be acceptable to the NRC. Acceptable trustees include appropriate State or Federal government agencies and financial institutions that have the authority to act as trustees and whose trust operations are regulated and examined by a Federal or State agency. Trust operations are regulated separately from other banking operations, and it is very common for a regulated bank not to have the authority to act as a trustee. In addition, NRC's requirement for trustees is not usually met by individuals who are not acting as a representative of a financial institution.

- C The word "National" in the title of a financial institution signals that the institution is *Federally regulated*, as do the words "National Association" or the initials "N.A." following its title. To determine whether such a financial institution qualifies as an acceptable trustee, licensees should contact the appropriate district office of the Office of the Comptroller of the Currency (OCC) and confirm that the institution (1) is Federally regulated and (2) has Federally regulated trust operations. The six district offices of the OCC, along with the States and territories under their jurisdiction, are:

## CHECKLIST 4-A

### TRUST FUNDS

- 9 Documentation is complete:
  - 9 1. Trust agreement (originally signed duplicate)
  - 9 2. Schedule A
  - 9 3. Schedule B
  - 9 4. Schedule C
  - 9 5. Certificate of events
  - 9 6. Certificate of resolution
  - 9 7. Letter of acknowledgment
  - 9 8. Receipt or statement from the trustee showing the trust's current market value
  - 9 9. Checklist 4-B (if model trust wording is modified or not used)
- 9 The trustee is qualified:
  - 9 The financial institution is regulated by a Federal or State agency.
  - 9 The financial institution has authority to act as a trustee and has trust operations that are regulated and examined by a Federal or State agency.
- 9 The trust's current market value equals or exceeds the required coverage level.

- Northeastern District Office (212-819-9860) -- CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT, District of Columbia, Puerto Rico, and Virgin Islands.
- Southeastern District Office (404-659-8855) -- AL, FL, GA, MS, NC, SC, TN, VA, and WV.
- Central District Office (312-360-8800) -- IL, IN, KY, MI, OH, and WI.
- Midwestern District Office (816-556-1800) -- IA, KS, MN, MO, NE, ND, and SD.
- Southwestern District Office (214-720-0656) -- AR, LA, NM, OK, and TX.
- Western District Office (415-545-5900) -- AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY, and Guam.

- C The word "State" in the title of a financial institution signals that the institution is *State regulated*. U.S. branches of foreign banks are usually regulated by the State in which

they are located. To determine whether a State-regulated financial institution qualifies as an acceptable trustee, licensees should contact the applicable State banking authority and confirm that the institution (1) is State regulated and (2) has State-regulated trust operations.

- C The titles of some financial institutions do not suggest that they are either Federally regulated or State regulated. In many such cases (but not all), these institutions are State regulated, as are many domestic branches of foreign banks.

The licensee may need or choose to replace the current trustee with a new trustee. To be acceptable to the NRC, any successor trustee must meet the same standard as the original trustee (i.e., must be an appropriate State or Federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency). To ensure that the change in trustee does not negatively impact the trust, the licensee should replace the trustee only after sufficient notification (i.e., 90 days or more) has been provided to both the NRC and the current trustee.

## 4.2 LEVEL OF COVERAGE

A trust must at all times contain sufficient assets, valued at their *current market value*, to complete decommissioning activities.<sup>7</sup> Therefore, at the time the trust is established, the trust must be fully funded, with a market value at least as great as the licensee's current decommissioning cost estimate or certification amount. When submitting a trust to NRC, a licensee should also submit documentation verifying the amount in the trust (e.g., a receipt from the trustee or a fund balance statement). If the licensee's certification amount or estimated decommissioning cost increases to a level above the amount assured by the trust fund, the licensee must either (1) revise the trust to assure the higher amount or (2) obtain another financial assurance mechanism to make up the difference between the new coverage level and the amount of the trust.

In addition to being adequately funded, a trust agreement should allow the trustee access to the full level of coverage as appropriate to complete decommissioning activities. For example, in the model wording for a trust agreement, the trustee is authorized to make decommissioning payments only up to the amount listed in Schedule A to the trust agreement. If the amount listed in Schedule A is not at least as great as the NRC-approved cost estimate or certification amount, the trustee may not be able to make sufficient payments to complete decommissioning, even if there are sufficient monies in the trust.

## 4.3 RECOMMENDED DOCUMENTATION

The terms and conditions of a trust are governed by a written trust agreement. The wording of a trust agreement may vary, but Section 4.4 of this regulatory guide is a "model" trust agreement that would meet NRC's requirements and is recommended by the NRC. Other documentation must also be submitted with a trust agreement. As summarized in Checklist 4-A,<sup>8</sup> the following documentation is to be submitted with the trust agreement.

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<sup>7</sup> The exception to this rule is a trust fund that is being combined with another financial mechanism. For a combination of mechanisms, the *sum* of the coverage provided by the mechanisms must be at least equal to the required coverage level.

<sup>8</sup> Supporting documentation may differ for licensees who submit trusts that differ from the recommended model.

- C The *trust agreement* (along with any amendments) is the written document that specifies the terms and conditions of the trust. The wording contained in the model trust presented in Section 4.4 is acceptable to the NRC. Licensees who use other wording should refer to Checklist 4-B to ensure that the alternative wording contains all the necessary terms and conditions.
- C *Schedule A* identifies the name and address of the licensee, the NRC license numbers covered by the trust, the addresses of the licensed activity, the amount of regulatory assurances demonstrated by the trust agreement, and the date on which these amounts were last adjusted and approved by NRC.
- C *Schedule B* lists the property (i.e., cash, securities, or other liquid assets) used to establish the initial trust fund.
- C *Schedule C* specifies the compensation to be paid by the licensee to the trustee for its services.
- C The model *certificate of events* and the model *certificate of resolution* provide the format for instructing the trustee to release monies from the trust in order to fund decommissioning activities at the licensee's facility. When submitted as part of a financial assurance package, the certificates should be unexecuted drafts. (Actual authorization to release funds from the trust is accomplished when completed and notarized versions of these certificates are signed by the secretary of the licensee and presented to the trustee.)
- C The notarized *letter of acknowledgment* verifies the execution of the trust agreement and certifies the trustee's signature and authority to enter into the agreement.

## CHECKLIST 4-B

### Terms and Conditions Needed in Decommissioning Trust Agreements

*Use this checklist only if deviating from the wording recommended in Section 4.4.*

- 9 Execution date of trust.
- 9 Purpose of trust (“whereas” clauses).
- 9 Statement of licensee’s regulatory obligations as reason for the trust fund.
- 9 Grantor or grantors (introductory paragraph).
- 9 Trustee or trustees (introductory paragraph):
  - 9 1. Names and addresses; and
  - 9 2. Bank or corporate trustee.
- 9 Identification of facilities (name, address, and license number) and cost estimates or certification amounts (Section 2 and Schedule A).
- 9 Words of transfer, conveyance, and delivery in trust (Section 3).
- 9 Description of trust property (Section 4 and Schedule B):
  - 9 1. Cash,
  - 9 2. Securities, and
  - 9 3. Other liquid assets.
- 9 Additions to trust (Section 4).
- 9 Distribution of trust principal (Section 5):
  - 9 1. Disbursement to licensee upon proper certification;
  - 9 2. Payment for activities at NRC’s direction in writing;
  - 9 3. Refund to grantor at NRC’s written specification upon completion of decommissioning; and
  - 9 4. Maximum withdrawal of funds at one time for a particular license is limited to 10 percent of the remaining funds available for that license unless NRC written approval is attached.
- 9 Trust management (Sections 6 - 8):
  - 9 1. Discretionary powers;
  - 9 2. Fiduciary duty;
  - 9 3. Commingling and investment;
  - 9 4. Sale or exchange of trust property;
  - 9 5. Scope of investments;
  - 9 6. Express powers of trustee;
  - 9 7. Borrowing money and encumbering trust assets;
  - 9 8. Insurance (optional);
  - 9 9. Operation of business (optional); and
  - 9 10. Compromise of claims (optional).
- 9 Taxes and expenses (Section 9).
- 9 Annual valuation (Section 10).
- 9 Advice of counsel (Section 11).
- 9 Authority, compensation, and tenure of trustees (Sections 12 - 14):
  - 9 1. Trustee compensation (Schedule C);
  - 9 2. Successor trustee; and
  - 9 3. Instructions to trustee.
- 9 Amendment of agreement (Section 15).
- 9 Irrevocability and termination (Section 16).
- 9 Immunity and indemnification (Section 17).
- 9 Law to govern construction and operation of trust (Section 18).
- 9 Interpretation and severability (Section 19).
- 9 Signatures and titles.
- 9 Acknowledgments, seals, or attestations, if necessary or desired (witness by notary public).

## 4.4 Model Trust Fund Agreement

TRUST AGREEMENT, the Agreement entered into as of [insert date] by and between [insert name of licensee], a [insert name of State] [insert “corporation,” “partnership,” “association,” or “proprietorship”], herein referred to as the “Grantor,” and [insert name and address of a trustee acceptable to NRC], 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 [insert 30, 40, 70, or 72]. These regulations, applicable to the Grantor, require that a holder of, or an applicant for, a materials license issued pursuant to 10 CFR Part [insert 30, 40, 70, or 72] 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;

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 materials and activities identified in License Number [insert license number] issued pursuant to 10 CFR Part [insert 30, 40, 70, or 72], as shown in Schedule A.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund (the Fund) for the benefit of the NRC. The Grantor and the Trustee intend that no third party shall have access to the Fund except as provided herein.

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 the property, which is acceptable to the Trustee, described in Schedule B attached hereto. 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. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount of, or adequacy of the Fund, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the NRC.

Section 5. Payment for Required Activities Specified in the Plan. The Trustee shall make payments from the Fund to the Grantor upon presentation to the Trustee of the following:

- (a) A certificate duly executed by the Secretary of the Grantor attesting to the occurrence of the events, and in the form set forth in the attached Specimen Certificate of Events, and
- (b) A certificate attesting to the following conditions:
  - (1) that decommissioning is proceeding pursuant to an NRC-approved plan;
  - (2) that the funds withdrawn will be expended for activities undertaken pursuant to that plan; and
  - (3) that the NRC has been given 30 days prior notice of [insert name of licensee]'s intent to withdraw funds from the trust fund.

No withdrawal from the Fund for a particular license can exceed 10 percent of the remaining funds available for that license unless NRC written approval is attached.

In the event of the Grantor's default or inability to direct decommissioning activities, the Trustee shall make payments from the Fund as the NRC shall direct, in writing, to provide for the payment of the costs of required activities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the NRC from the Fund for expenditures for required activities in such amounts as the NRC shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the NRC 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 solely in the 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 as defined in the Investment Company Act of 1940, as amended (15 U.S.C. 80a-2(a)), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;
- (b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal government, and in obligations of the Federal government such as GNMA, FNMA, and FHLM bonds and certificates or State and Municipal bonds rated BBB or higher by Standard & Poor's or Baa or higher by Moody's Investment Services; and
- (c) For a reasonable time, not to exceed 60 days, the Trustee is authorized to hold uninvested cash, awaiting investment or distribution, without liability for the payment of interest thereon.

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 to allow duly authorized withdrawals at the joint request of the Grantor and the NRC or to reinvest in securities at the direction of the Grantor;
- (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 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, to the extent insured by an agency of the Federal government; 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 shall 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 shall be paid from the Fund.

Section 10. Annual Valuation. After payment has been made into this trust fund, the Trustee shall annually, at least 30 days before the anniversary date of receipt of payment into the trust fund, furnish to the Grantor and to the NRC a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days before the anniversary date of the establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the NRC 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 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 with the Grantor. (See Schedule C.)

Section 13. Successor Trustee. Upon 90 days notice to the NRC and the Grantor, the Trustee may resign; upon 90 days notice to NRC and the Trustee, the Grantor may replace the Trustee; but such resignation or replacement shall not be effective until the Grantor has appointed a successor Trustee, the successor accepts the appointment, the successor is ready to assume its duties as trustee, and NRC has agreed, in writing, that the successor is an appropriate State or Federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency. The successor Trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. When the resignation or replacement is effective, 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, the NRC, and the present Trustee, by certified mail 10 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 issues orders, requests, or instructions to the Trustee these shall be in writing, signed by the NRC or its 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 or the NRC 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, 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 the NRC, or by the Trustee and the NRC if the Grantor ceases to exist. All amendments shall meet the relevant regulatory requirements of the NRC.

Section 16. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 15, this trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the NRC, or by the Trustee and the NRC 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.

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 or the NRC 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. 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.

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

ATTEST:  
[Title] [Seal]

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

ATTEST:  
[Title] [Seal]

## 4.5 MODEL TRUST AGREEMENT SCHEDULES

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### Schedule A

This Agreement demonstrates financial assurance for the following cost estimates or certification amounts for the following licensed activities:

U.S. NUCLEAR REGULATORY COMMISSION LICENSE NUMBER(S)	NAME AND ADDRESS OF LICENSEE	ADDRESS OF LICENSED ACTIVITY	COST ESTIMATES FOR REGULATORY ASSURANCES DEMONSTRATED BY THIS AGREEMENT
--	------------------------------------	------------------------------------	---

The cost estimates listed here were last adjusted and approved by the NRC on [insert date].

---

### Schedule B

AMOUNT \_\_\_\_\_

AS EVIDENCED BY \_\_\_\_\_

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### Schedule C

Trustee's fees shall be \$ \_\_\_\_\_ per year.

## 4.6 MODEL 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, \_\_\_\_\_, Secretary of [insert name of licensee], hereby certify that the following events have occurred:

1. [Insert name of licensee] is required to commence 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 approved by the United States 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.

\_\_\_\_\_  
Secretary of [insert name of licensee]

\_\_\_\_\_  
Date

**4.7 MODEL CERTIFICATE OF RESOLUTION**

I, \_\_\_\_\_, do hereby certify that I am Secretary 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 \_\_\_\_\_, 19\_\_.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the seal of this Corporation this \_\_\_ day of \_\_\_\_\_, 19\_\_.

\_\_\_\_\_  
Secretary

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.

**4.8 MODEL LETTER OF ACKNOWLEDGMENT**

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 [insert title], of \_\_\_\_\_, national banking association, 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]

## 5. ESCROW ACCOUNTS

A decommissioning *escrow* (or *escrow account*) is an irrevocable, three-party written agreement whereby the licensee transfers assets (i.e., cash, securities, or other liquid assets) at least equal to the cost of decommissioning to an *escrow agent*, such as a bank. The escrow agent manages the account according to the terms of the written agreement for the benefit of the *beneficiary* (NRC). An escrow account functions much like a savings account except that (1) monies are legally segregated for a specific purpose and (2) the account is administered by someone with a fiduciary responsibility to keep or use the property in the account. The purpose of an escrow account is to help execute an underlying contract. For purposes of financial assurance for decommissioning, the underlying contract is the NRC licensing agreement.

The remainder of this section discusses the primary criteria that determine whether particular escrow account submissions will be acceptable to NRC.

- C Section 5.1 describes qualifications required of the issuer (the escrow agent).
- C Section 5.2 addresses funding and the adequacy of coverage.
- C Section 5.3 discusses the documentation that supports an escrow account.
- C Section 5.4 presents a model escrow account submission that NRC has found to be acceptable.

This section also contains two checklists designed to assist licensees in preparing acceptable decommissioning escrows. Checklist 5-A summarizes the primary criteria used by NRC to evaluate escrows. Checklist 5-B (which should be used only by licensees that revise or do not use the model wording for escrow agreements) presents terms and conditions that are recommended for escrow agreements.

### 5.1 QUALIFICATIONS OF THE ISSUER: THE ESCROW AGENT

The escrow agent should be a financial institution whose operations are regulated and examined by a Federal or State agency. This criterion is not usually met by individuals who are not acting as a representative of a financial institution.

- C The word “National” in the title of a financial institution signals that the institution is *Federally regulated*, as do the words “National Association” or the initials “N.A.” following its title. To determine whether such a financial institution qualifies as an acceptable escrow agent, licensees should contact the appropriate district office of the Office of the Comptroller of the Currency (OCC) and confirm that the institution is Federally regulated. The six district offices of the OCC, along with the States and territories under their jurisdiction, are as follows:
  - Northeastern District Office (212-819-9860) -- CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT, District of Columbia, Puerto Rico, and Virgin Islands.

## CHECKLIST 5-A

### ESCROW ACCOUNTS

- 9 Documentation is complete:
  - 9 1. Escrow agreement (originally signed duplicate)
  - 9 2. Model certificate of events
  - 9 3. Model certificate of resolution to commence decommissioning
  - 9 4. Certified resolution authorizing the making and performance of the escrow agreement
  - 9 5. Certificate of names and specimen signatures
  - 9 6. Receipt or statement from the escrow agent showing the escrow's current market value
  - 9 7. Checklist 5-B (if model escrow wording is modified or not used)
- 9 The financial institution is regulated by a Federal or State agency.
- 9 The escrow's current market value equals or exceeds the required coverage level.

- Southeastern District Office (404-659-8855) -- AL, FL, GA, MS, NC, SC, TN, VA, and WV.
- Central District Office (312-360-8800) -- IL, IN, KY, MI, OH, and WI.
- Midwestern District Office (816-556-1800) -- IA, KS, MN, MO, NE, ND, and SD.
- Southwestern District Office (214-720-0656) -- AR, LA, NM, OK, and TX.
- Western District Office (415-545-5900) -- AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY, and Guam.

- C The word "State" in the title of a financial institution signals that the institution is *State regulated*. U.S. branches of foreign banks are usually regulated by the State in which they are located. To determine whether a State-regulated financial institution qualifies as an acceptable escrow agent, licensees should contact the applicable State banking authority and confirm that the institution is State regulated.
- C The titles of some financial institutions do not suggest that they are either Federally regulated or State regulated. In many such cases (but not all), these institutions are State regulated, as are many domestic branches of foreign banks.

The licensee may need or choose to replace the current escrow agent with a new escrow agent. Any successor escrow agent must meet the same standard as the original

escrow agent (i.e., must be a financial institution whose operations are regulated and examined by a Federal or State agency). To ensure that the change in escrow agent does not negatively impact the escrow, the licensee should replace the escrow agent only after sufficient notification (90 days or more) has been provided to both the NRC and the current escrow agent.

## 5.2 LEVEL OF COVERAGE

An escrow must at all times contain sufficient assets, valued at their *current market value*, to complete decommissioning activities.<sup>9</sup> Therefore, at the time the escrow is established, the escrow must be fully funded, with a market value at least as great as the licensee's current decommissioning cost estimate or certification amount. When submitting an escrow to NRC, a licensee should submit documentation verifying the amount in the escrow (e.g., a receipt from the escrow agent or a fund balance statement). If the licensee's certification amount or estimated decommissioning cost increases to a level above the amount assured by the escrow account, the licensee must either (1) revise the escrow to assure the higher amount or (2) obtain another financial assurance mechanism to make up the difference between the new coverage level and the amount of the escrow.

## 5.3 RECOMMENDED DOCUMENTATION

The terms and conditions of an escrow are governed by a written escrow agreement. The wording of an escrow agreement may vary, but Section 5.4 of this regulatory guide is a "model" escrow agreement that would meet NRC's requirements and is recommended by the NRC. Other documentation must be submitted with an escrow. As summarized in Checklist 5-A,<sup>10</sup> the following documentation is to be submitted for use with the model escrow.

- C The *escrow agreement* (along with any amendments) is the written document that specifies the terms and conditions of the escrow. The wording contained in the model escrow presented in Section 5.4 is acceptable to NRC. Licensees who use other wording should refer to Checklist 5-B to be sure that the alternative wording contains all the necessary terms and conditions.
- C The model *Certificate of Events* (Section 5.5) and the model *Certificate of Resolution To Commence Decommissioning* (Section 5.6) provide the required format for instructing the escrow agent to release monies from the escrow in order to fund decommissioning activities at the licensee's facility. When submitted as part of a financial assurance package, the specimen certificates should be unexecuted drafts. (Actual authorization to release funds from the escrow is accomplished when completed and notarized versions of these certificates are signed by the secretary of the licensee and presented to the escrow agent.)
- C The *Certified Resolution Authorizing the Making and Performance of the Escrow Agreement* (Section 5.7) officially certifies that the licensee's Board of Directors has authorized the licensee to enter into the escrow agreement.

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<sup>9</sup> The exception to this rule is an escrow account that is being combined with another financial mechanism. For a combination of mechanisms, the *sum* of the coverage provided by the mechanisms must be at least equal to the required coverage level.

<sup>10</sup> Supporting documentation may differ for licensees who submit trusts that differ from the recommended model.

- C The *Certificate of Names and Specimen Signatures* (Section 5.8) presents the names and signatures of the licensee's officers or representatives who are authorized to sign the escrow agreement and notices, instructions, and other communications under the agreement.

## CHECKLIST 5-B

### Terms and Conditions Needed in Decommissioning Escrow Agreements

*Use this checklist only if deviating from the wording recommended in Section 5.4.*

- 9 Introduction explaining the nature of the agreement between the parties and referring to the NRC license agreement concerning the regulatory obligations of the licensee (Paragraph 1).
- 9 Identification of the escrow agent (Paragraph 1):
  - 9 1. Name and address of escrow agent;
  - 9 2. Position of escrow agent; and
  - 9 3. Duties and liabilities of escrow agent.
- 9 Identification of the name, address, and license number of the facility, corresponding estimated costs of required activities, and the amount of financial assurance provided by the escrow account (Paragraph 1).
- 9 Recital of delivery of items placed in escrow (Paragraph 2):
  - 9 1. Cash,
  - 9 2. Securities, and
  - 9 3. Other liquid assets.
- 9 Recital of conditions and terms of the escrow account (Paragraph 3).
- 9 Terms and conditions upon which items in escrow will be disbursed (Paragraph 4):
  - 9 1. Disbursements to licensee upon proper certification;
  - 9 2. Conditions that constitute default;
  - 9 3. Rights of parties upon default;
  - 9 4. Rights and duties of escrow agent upon default;
  - 9 5. Persons or names or positions to which funds may be released; and
  - 9 6. Maximum withdrawal of funds at one time for a particular license is limited to 10 percent of the remaining funds available for that license unless NRC written approval is attached.
- 9 Recital of irrevocability of escrow arrangement (Paragraph 5).
- 9 Escrow agent's rights and duties (Paragraph 6).
- 9 Annual valuation requirement (Paragraph 7).
- 9 Successor escrow agent (Paragraph 8).
- 9 Recital of instructions to the escrow agent (Paragraph 9).
- 9 Compensation and expenses of escrow agent (Paragraph 10).
- 9 Amendment of the escrow agreement (Paragraph 11).
- 9 Termination of escrow (Paragraph 12).
- 9 Requirement for the financial institution issuing the mechanism to notify the licensee and the NRC at least 90 days prior to cancellation or nonrenewal.
- 9 Interpretation of escrow agreement (Paragraph 13).
- 9 Acceptance of appointment by escrow agent (Paragraph 14).
- 9 Severability provision (Paragraph 15).
- 9 Signatures of licensee and escrow agent.

## 5.4 MODEL FOR AN ESCROW AGREEMENT

Escrow Account Number \_\_\_\_\_

### Paragraph 1. Establishment of Escrow Account.

It is agreed between the parties that [insert name of licensee] has elected to establish an escrow account with [insert name, address, and position (if applicable) 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 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 market value of each item] has (have) been delivered to escrow.

[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 following two conditions has been satisfied:

- (1) The conditions specified in Paragraph 4 of this Agreement have been met; or
- (2) The decommissioning activities required by 10 CFR Part [insert 30, 40, 70, or 72] have been completed, the license has been terminated, the facility site is available for unrestricted use for any public or private purpose, and the escrow account has been terminated by joint notice, in writing, from [insert name of licensee] and the U.S. Nuclear Regulatory Commission (NRC), or by NRC alone if the licensee ceases to exist.

### Paragraph 4. Disbursement of property in Escrow Account.

[Insert name of escrow agent] shall make payments from the escrow account upon presentation to the escrow agent of the following:

- (a) A certificate duly executed by the Secretary of the [insert name of licensee] attesting to the occurrence of the events, and in the form set forth in the attached Specimen Certificate of Events, and
- (b) A certificate attesting to the following conditions:
  - (1) that decommissioning is proceeding pursuant to an NRC-approved plan;
  - (2) that the funds withdrawn will be expended for activities undertaken pursuant to that plan; and
  - (3) that the NRC has been given 30 days prior notice of [insert name of licensee]'s intent to withdraw funds from the escrow account.

No withdrawal from the account for a particular license can exceed 10 percent of the remaining funds available for that license unless NRC written approval is attached.

Or upon [insert name of escrow agent] receiving written notification of licensee's default from the NRC, [insert name of escrow agent] shall make payments from the escrow account as the NRC 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 NRC from the escrow account for expenses for required activities in such amounts as the NRC shall direct in writing. In addition, the escrow agent shall refund to [insert name of licensee] such amounts as the NRC specifies, in writing. Upon refund, such funds shall no longer constitute part of the escrow account as described in Paragraph 2 above.

Paragraph 5. Irrevocability.

It is also agreed between the parties that this escrow became irrevocable upon delivery to [insert name of escrow agent], the escrow agent, and will remain irrevocable and in full force and effect until the occurrence of one of the conditions described in Paragraph 3 above.

Paragraph 6. Powers of the Escrow Agent.

The only power 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 NRC 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 licensed facility(ies), or any of their affiliates as defined in the Investment Company Act of 1940, as amended (15 U.S.C. 80a-2(a)), shall not be acquired or held, unless they are securities or other obligations of the Federal government;
- (b) The escrow agent is authorized to invest the escrow account in time or demand deposits to the extent insured by an agency of the Federal government, and in obligations of the Federal government such as GNMA, FNMA, and FHLM bonds and certificates or State and Municipal bonds rated BBB or higher by Standard & Poor's or Baa or higher by Moody's Investment Services; and
- (c) The escrow agent is authorized to hold uninvested cash, awaiting investment or distribution, for a reasonable time and without liability for the payment of interest thereon.

#### 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 to the extent insured by an agency of the Federal government; and
- (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 annually, at least 30 days before the anniversary date of receipt of the property into the escrow account, furnish to the licensee and to the NRC a statement confirming the value of the escrow account. Any securities in the account shall be valued at market value as of no more than 60 days before the anniversary date of the establishment of the escrow account. 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 NRC and [insert name of licensee], the escrow agent may resign; upon 90 days notice to the NRC and the escrow agent, [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, the successor accepts the appointment, and the successor

is ready to assume its duties as escrow agent. The successor escrow agent shall have the same powers and duties as those conferred upon the escrow agent under this Agreement. When the resignation or replacement is effective, 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, the NRC, and the current escrow agent by certified mail 10 days before the change becomes effective. Any expenses 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 or NRC may designate in writing. All orders, requests, and instructions from the NRC shall be in writing, signed by the designees of the NRC. 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 NRC 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 or the NRC, 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 name of 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 of Agreement.

This Agreement may be amended by an instrument in writing executed by the licensee, the escrow agent, and the NRC, or by the escrow agent and the NRC if the licensee ceases to exist. All amendments shall meet the relevant regulatory requirements of the NRC.

Paragraph 12. Termination.

This Agreement can be terminated by written notice of termination to the escrow agent signed by [insert name of licensee] and the NRC, or by the NRC alone if the licensee ceases to exist.

Paragraph 13. Interpretation.

This escrow agreement constitutes the entire agreement between [insert name of licensee] and [insert name of 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 (if applicable) of escrow agent] does hereby acknowledge its appointment by [insert name of 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 that will remain valid and enforceable.

Paragraph 16.

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:

- (1) A certified resolution of its Board of Directors authorizing the making and performance of this Agreement; and
- (2) A certificate as to the names and specimen signatures of its officers or representatives 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 \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

By \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

[Date]

[Witness by Notary Public]

## 5.5 MODEL 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, \_\_\_\_\_, Secretary of [insert name of licensee], hereby certify that the following events have occurred:

1. [Insert name of licensee] is required to commence 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 approved by the United States 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.

\_\_\_\_\_  
Secretary of [insert name of licensee]

\_\_\_\_\_  
Date

**5.6 MODEL CERTIFICATE OF RESOLUTION  
TO COMMENCE DECOMMISSIONING**

I, \_\_\_\_\_, do hereby certify that I am Secretary 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 \_\_\_\_\_, 19\_\_.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the seal of this Corporation this \_\_\_ day of \_\_\_\_\_, 19\_\_.

\_\_\_\_\_  
Secretary

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.

**5.7 CERTIFIED RESOLUTION AUTHORIZING THE MAKING  
AND PERFORMANCE OF THE ESCROW AGREEMENT**

I, \_\_\_\_\_, do hereby certify that I am Secretary 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 \_\_\_\_\_, 19\_\_.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the seal of this Corporation this \_\_\_ day of \_\_\_\_\_, 19\_\_.

\_\_\_\_\_  
Secretary

RESOLVED, that this Board of Directors hereby authorizes the President, or such other employee of the Company as he may designate, to enter into an escrow agreement 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 approve with and upon the advice of Counsel.

## 5.8 CERTIFICATE OF NAMES AND SPECIMEN SIGNATURES

The individuals listed below are authorized to sign this Escrow Agreement on behalf of [insert name of licensee], and are authorized to sign any notices, instructions, and other communications made pursuant to the Agreement.

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Signature \_\_\_\_\_

## 6. GOVERNMENT FUNDS

A *government fund* is a trust fund or escrow account for which a State is acting as trustee or escrow agent. To use this mechanism, a licensee and a State or State agency must agree that funds in an amount at least equal to the cost of decommissioning will be held in a special State fund or account and will be used solely to carry out decommissioning activities. The licensee must deposit the required amount of cash, securities, or other liquid assets in the special fund or account prior to beginning facility operations. If the licensee defaults, the State or State agency must arrange for the necessary decommissioning work to be completed by (1) ordering the licensee to decommission the site, (2) ordering the licensee to select a decommissioning contractor, or (3) choosing a contractor itself. (In the event that the State or State agency is unable to exercise its options, NRC must select the contractor.) The special fund or account terminates when decommissioning is complete, the license is terminated, and the facility site is available for unrestricted use for any public or private purpose.

The remainder of this section discusses the primary criteria that determine whether particular government fund submissions will be acceptable to NRC.

- C Section 6.1 describes qualifications required of the issuer (the State or State agency).
- C Section 6.2 addresses funding and the adequacy of coverage.
- C Section 6.3 discusses the documentation that supports a government fund.

This section also contains a checklist designed to assist licensees who use government funds for decommissioning. Checklist 6-A summarizes the primary criteria used by NRC to evaluate government funds.

### 6.1 QUALIFICATIONS OF THE ISSUER: THE STATE OR STATE AGENCY

As a State government entity, the State or State agency holding the assets in the government fund would automatically qualify as an acceptable trustee or escrow agent. However, a State or State agency must have the authority to establish special segregated funds or accounts to receive and hold funds for specified purposes.

### 6.2 LEVEL OF COVERAGE

A government fund must at all times contain sufficient assets, valued at their *current market value*, to complete decommissioning activities.<sup>11</sup> Therefore, at the time the fund or account is established, it must be fully funded, with a market value at least as great as the licensee's current decommissioning cost estimate or certification amount. When submitting a government fund to NRC, a licensee should also submit documentation verifying the amount in the fund or account (e.g., a receipt from the State or State agency, or a fund/account balance statement). If the licensee's certification amount or estimated decommissioning cost increases

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<sup>11</sup> The exception to this rule is a government fund that is being combined with another financial mechanism. For a combination of mechanisms, the *sum* of the coverage provided by the mechanisms must be at least equal to the required coverage level.

to a level above the amount assured by the government fund, the licensee must either (1) revise the government fund to assure the higher amount or (2) obtain another financial assurance mechanism to make up the difference between the new coverage level and the amount of the government fund.

### **6.3 RECOMMENDED DOCUMENTATION**

The terms and conditions of a government fund are governed by a written trust agreement or escrow agreement. The wording of a government fund may vary, but Sections 4.4 and 5.4 of this regulatory guide include a model trust agreement and a model escrow agreement that would meet NRC's requirements and are recommended by the NRC. As summarized in Checklist 6-A, the following documentation is to be submitted with a government fund.

- C The *trust agreement* or *escrow agreement* (along with all supporting documentation and any amendments) is the written document that specifies the terms and conditions of the government fund. The wording of the model trust and escrow agreements presented in Sections 4.4 and 5.4, respectively, is acceptable to the NRC. Licensees who use other wording should refer to Checklists 4-B or 5-B to be sure that the alternative wording contains all the necessary terms and conditions.
- C A list of assets deposited with the State or State agency. The list should state the assets' current market value and the date on which the assets were transferred to the government fund.
- C Documentation specifying the licensee's certification amount or estimated cost of decommissioning.
- C A letter from the State or State agency stating that use of the funds will be restricted to covering the costs of decommissioning upon the licensee's default.

## CHECKLIST 6-A

### GOVERNMENT FUNDS

- 9 Documentation is complete:
- 9 1. Either:
    - Trust agreement (originally signed duplicate) and all supporting documentation (see Section 4 and attach Checklist 4-A)
    - or
    - Escrow agreement (originally signed duplicate) and all supporting documentation (see Section 5 and attach Checklist 5-A)
  - 9 2. List of assets deposited with the State or State agency
  - 9 3. Specification of the current market value of the assets deposited
  - 9 4. Specification of the date on which assets were transferred to the fund or account
  - 9 5. Specification of the licensee's certification amount or estimated cost of decommissioning
  - 9 6. Letter from State or State agency stating that use of funds will be restricted to covering the costs of decommissioning upon the licensee's default
  - 9 7. Checklist 4-B or 5-B (if model trust or escrow wording is modified or not used)
- 9 The State or State agency has the authority to establish special segregated funds or accounts to receive and hold funds for specified purposes.
- 9 The government fund's current market value equals or exceeds the required coverage level.

## 7. CERTIFICATES OF DEPOSIT

A *certificate of deposit (CD)* is a deposit of cash by a licensee into a bank for a specified period of time. The licensee deposits in a bank funds sufficient to cover the cost of decommissioning and receives a CD. If the licensee defaults on its decommissioning obligations, the NRC will draw on CDs used as financial assurance instruments. In addition, the licensee must establish a trust fund, escrow account, or government fund into which funds may be received if drawn from the CD in the event of default.

Both nonnegotiable and negotiable CDs may be used to fulfill decommissioning financial assurance requirements.

- c If a CD is *nonnegotiable*, only the payee designated on the certificate may receive the funds from the bank when the CD reaches maturity. Consequently, the trustee of the trust, escrow agent of the escrow account, or State or State agency administering the government fund (if the State or State agency can hold funds without depositing them into general State revenues) must be named as payee and must be in possession of the CD.
- c If a CD is *negotiable*, however, anyone holding the CD may receive the funds. Consequently, the trustee, the escrow agent, or the State or State agency must be in possession of the CD.

A certificate of deposit used to provide financial assurance for decommissioning should be for a limited time period so that the face value can be adjusted for inflation and for changes in decommissioning costs. Licensees may use either time or demand CDs to provide financial assurance. Time deposits are payable at a certain time, while demand deposits are payable on demand after a specified period of time (usually 30 to 90 days) has elapsed. Demand CDs allow the holder to withdraw funds at will at any time after the specified period has elapsed and, therefore, may be better suited to the contingency requirements of a decommissioning financial assurance mechanism. If time CDs are used, their value must be sufficient to cover decommissioning costs even if a penalty is incurred for withdrawal prior to the date specified on the certificates.

All CDs obtained by licensees to provide financial assurance for decommissioning must be fully insured by the Federal Deposit Insurance Corporation (FDIC). Deposits by a given entity in Federally insured banks and savings and loan institutions are insured only up to the basic total amount of \$100,000. These limitations also apply to the interest earned on deposits. If the principal provided by the licensee is equal to or greater than the limit established through Federal bank insurance, the interest may remain uninsured. Thus, if a licensee is securing financial assurance of more than \$100,000 using CDs, deposits should be split among several institutions so that all funds are fully insured by the FDIC. For example, if \$750,000 in financial assurance coverage is required, the licensee would need to purchase at least eight CDs issued by eight different financial institutions whose total value at the time of financial assurance certification equaled \$750,000.

In general, a bank issuing a CD may have a “set-off right” to the deposited funds. This refers to the ability of the bank to look to deposits it holds for the repayment of any indebtedness to the bank on the part of the depositor and to apply the debtor’s deposit to these debts as they become due. To reduce the likelihood that the bank’s set-off right might apply to

CDs assuring decommissioning, licensees using CDs should inform the issuing bank that the certificate is being used to demonstrate financial assurance in compliance with NRC's regulatory requirements. Also, licensees using non-negotiable CDs should name the trustee, escrow agent, or State or State agency as payee.

The remainder of this section discusses the primary criteria that determine whether particular submissions in regard to CDs will be acceptable to NRC.

- c Section 7.1 describes qualifications required of the issuer.
- c Section 7.2 addresses funding and the adequacy of coverage.
- c Section 7.3 discusses the documentation that supports a certificate of deposit.
- c Section 7.4 presents a model CD that NRC has found to be acceptable.

This section also contains two checklists designed to assist licensees who will use CDs. Checklist 7-A summarizes the primary criteria used by NRC to evaluate CDs. Checklist 7-B (which should be used only by licensees who revise or do not use the model wording for CDs) presents terms and conditions that are recommended for CDs.

## **7.1 QUALIFICATIONS OF THE ISSUER**

Banks issuing CDs for financial assurance should be insured by the Federal Deposit Insurance Corporation (FDIC).

Also, as noted above, a licensee must deposit CDs into a trust fund, escrow account, or government fund. Information on the qualifications of the issuers of these types of mechanisms is provided in Sections 4, 5, and 6.

## **7.2 LEVEL OF COVERAGE**

A CD must at all times have a *current market value* (less any potential penalty for early withdrawal) that is sufficient to complete decommissioning activities.<sup>12</sup> If the licensee's certification amount or estimated decommissioning cost increases to a level above the amount assured by the CD, the licensee must either (1) revise the CD to assure the higher amount or (2) obtain another financial assurance mechanism to make up the difference between the new coverage level and the amount of the CD.

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<sup>12</sup> The exception to this rule is a CD that is being combined with another financial mechanism. For a combination of mechanisms, the *sum* of the coverage provided by the mechanisms must be at least equal to the required coverage level.

### 7.3 RECOMMENDED DOCUMENTATION

The terms and conditions of a CD are governed by a written certificate. The wording of a CD may vary, but Section 7.4 of this regulatory guide is a model CD that would meet

#### CHECKLIST 7-A

#### CERTIFICATES OF DEPOSIT

- 9 Documentation is complete:
  - 9 1. Certificate of deposit (originally signed duplicate)
  - 9 2. Either:
    - Trust agreement (originally signed duplicate) and all supporting documentation (see Section 4 and attach Checklist 4-A)  
or
    - Escrow agreement (originally signed duplicate) and all supporting documentation (see Section 5 and attach Checklist 5-A)  
or
    - Government fund (originally signed duplicate) and all supporting documentation (see Section 6 and attach Checklist 6-A)
  - 9 3. Specification of the current market value of the CD
  - 9 4. Specification of the date on which the CD was transferred to the fund or account
  - 9 5. Specification of the licensee's certification amount or estimated cost of decommissioning
  - 9 6. Verification that the CD has been placed into the trust fund, escrow account, or government fund
  - 9 7. Letter from State or State agency stating that use of funds will be restricted to covering the costs of decommissioning upon the licensee's default (needed *only* if a government fund is established to hold the CD)
  - 9 8. Checklist 7-B (if model CD wording is modified or not used)
  - 9 9. Checklist 4-B or 5-B (if model trust or escrow wording is modified or not used)
- 9 The financial institution is insured by the Federal Deposit Insurance Corporation.
- 9 The CD's current market value (less any potential penalty for early withdrawal) equals or exceeds the required coverage level.

the NRC's requirements and is recommended by the NRC. As summarized in Checklist 7-A,<sup>13</sup> the following documentation is to be submitted with a CD.

- C The *certificate of deposit* constitutes the bank's written acknowledgment of the receipt and deposit of a sum of money, its promise of repayment, and other applicable terms and conditions. The wording of a CD may vary, but Section 7.4 of this guide is a model CD that is acceptable to the NRC. Licensees who use other wording should refer to Checklist 7-B to be sure that the alternative wording contains all the necessary terms and conditions.
- C A *trust fund, escrow account, or government fund* must be established to hold the CD. The trust, escrow, or government fund should satisfy the criteria described in Sections 4, 5, or 6, respectively, and in Checklists 4-A, 5-A, or 6-A, respectively, of this regulatory guide.
- C Documentation specifying (1) the current market value of the CD, (2) the date on which the CD was transferred to the trust fund, escrow account, or government fund, and (3) the licensee's certification amount or estimated cost of decommissioning.
- C Verification (e.g., a letter or receipt) from the trustee, escrow agent, or State or State agency that the CD has been placed into the trust fund, escrow account, or government fund.
- C A letter from the State or State agency stating that use of funds will be restricted to covering the costs of decommissioning upon the licensee's default (needed only if the CD is held in a government fund).

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<sup>13</sup> Supporting documentation may differ for licensees who submit CDs that differ from the recommended model.

## CHECKLIST 7-B

### Terms and Conditions Needed in Decommissioning Certificates of Deposit

*Use this checklist only if deviating from the wording recommended in Section 7.4.*

- 9 Time or demand deposit.
- 9 Non-negotiable or negotiable instrument:
  - 9 If non-negotiable, the certificate of deposit names the trustee, escrow agent, or State or State agency as payee and is in the possession of the trustee, escrow agent, or State or State agency.
  - 9 If negotiable, the certificate of deposit is in the possession of the trustee, escrow agent, or State or State agency.
- 9 Name and address of issuing bank.
- 9 Number of certificate.
- 9 Name of depositor.
- 9 Amount of funds deposited.
- 9 Name or position of payee or holder.
- 9 Date of maturity.
- 9 Rate of interest.
- 9 Statement of licensee's regulatory obligations as reason for the CD.
- 9 Names, addresses, and license numbers of assured facilities.
- 9 Provision for automatic renewal.
- 9 Limitation on withdrawal.
- 9 Notice requirements.
- 9 Provision governing penalty for early withdrawal in the event of default.
- 9 Power of bank not to renew.
- 9 The financial institution issuing the mechanism must notify the licensee and the NRC at least 90 days prior to cancellation or non-renewal.
- 9 Deposit insurance covering all CDs obtained by the licensee.
- 9 Signature and date.

## 7.4 MODEL CERTIFICATE OF DEPOSIT

[Name and address of issuing bank]

### CERTIFICATE OF DEPOSIT NO. [INSERT NUMBER]

[Insert name of licensee] has deposited not subject to check \_\_\_\_\_ Dollars (\$\_\_\_\_\_) payable to the order of the [if the CD is nonnegotiable, insert the name of the trustee of the trust, the escrow agent of the escrow account, or the State or State agency administering the government fund; if the CD is negotiable, insert "holder"] in current funds [insert number not less than 30] days after the date written above, 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 at [insert facility name(s), address(es), and license number(s)], as required under Title 10 of the Code of Federal Regulations, Part [insert 30, 40, 70, or 72]. Accordingly, this certificate will be renewed automatically unless written notice of one of the following events is received from the U.S. Nuclear Regulatory Commission (NRC): (1) the default of the [insert name of licensee] on these obligations; (2) the termination of the facility license; or (3) the substitution of another financial assurance mechanism. In the event the NRC notifies the bank of the licensee's default, the bank shall pay the [if the CD is nonnegotiable, insert "payee"; if the CD is negotiable, insert "holder"] the full amount of this certificate plus any interest accrued thereon, for deposit into the [insert "trust fund," "escrow account," or "government fund"] established for decommissioning.

The bank will notify [insert name of licensee] and the NRC at least 90 days prior to cancellation or nonrenewal of this certificate.

The deposit documented in this certificate is insured by the Federal Deposit Insurance Corporation.

[Signature of authorized representative of the issuer]

[Date]

## **8. DEPOSITS OF GOVERNMENT SECURITIES**

*A deposit of government securities* is the deposit by a licensee (into a trust fund, an escrow account, or a government fund) of securities backed by the Federal government or a State or local government.

Procedures for receipt and possible reinvestment of interest from the securities should be established in the trust agreement (see Section 4) or escrow agreement (see Section 5) governing the deposit of the securities. The proper registrant for U.S. Treasury securities is the trustee of the trust, the escrow agent of the escrow account, or the State or State agency administering the government fund.

The deposit of government securities into a trust fund, escrow account, or government fund requires the careful attention of the trustee, escrow agent, or State or State agency with respect to the following matters:

- C Proper registration and endorsements;
- C Reinvesting interest payments;
- C Handling instruments with varying maturity dates;
- C Reinvesting funds from matured and redeemed instruments; and
- C Filing proper forms in a timely fashion with the appropriate government agencies.

The remainder of this section discusses the primary criteria that determine whether particular deposit of government securities submissions will be acceptable to NRC.

- C Section 8.1 describes qualifications required of the issuer.
- C Section 8.2 addresses funding and the adequacy of coverage.
- C Section 8.3 discusses the documentation that supports a deposit of government securities.

This section also contains a checklist designed to assist licensees who use deposits of government securities. Checklist 8-A summarizes the primary criteria used by NRC to evaluate deposits of government securities.

### **8.1 QUALIFICATIONS OF THE ISSUER**

Securities used in a deposit of government securities must be backed by the Federal government or a State or local government. Acceptable government securities include:

- C U.S. Treasury bills, notes, and bonds,

## CHECKLIST 8-A

### DEPOSITS OF GOVERNMENT SECURITIES

- 9 Documentation is complete:
- 9 1. Trust agreement (originally signed duplicate) and all supporting documentation (see Section 4 and attach Checklist 4-A)  
or  
Escrow agreement (originally signed duplicate) and all supporting documentation (see Section 5 and attach Checklist 5-A)  
or  
Government fund (originally signed duplicate) and all supporting documentation (see Section 6 and attach Checklist 6-A).
- 9 2. List of securities deposited with the trustee, escrow agent, or State or State agency:  
9 U.S. Treasury bills  
9 U.S. Treasury notes  
9 U.S. Treasury bonds  
9 Government National Mortgage Association pass-through certificates (GNMAs)  
9 Federal National Mortgage Association bonds (FNMA)s  
9 Federal Home Loan Mortgage Corporation (FHLM) bonds  
9 State or municipal bonds rated BBB or higher by Standard & Poor's, or Baa or higher by Moody's Investment Services
- 9 3. Specification of the current market value of the securities deposited
- 9 4. Specification of the date on which securities were transferred to the fund or account
- 9 5. Specification of the licensee's certification amount or estimated cost of decommissioning
- 9 6. Letter from State or State agency stating that use of funds will be restricted to covering the costs of decommissioning upon the licensee's default (needed *only* if a government fund is established to hold securities)
- 9 7. Checklist 4-B or 5-B (if model trust or escrow wording is modified or not used)
- 9 The current market value of deposited securities equals or exceeds the required coverage level.

- C Government National Mortgage Association (GNMA) pass-through certificates,
- C Mortgage-backed bonds issued by the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLM); and
- C State or municipal bonds rated BBB or higher by Standard & Poor's, or Baa or higher by Moody's Investment Services.

Also, a licensee must deposit government securities into a trust fund, escrow account, or government fund. Information on these mechanisms is provided in Sections 4, 5, and 6.

## 8.2 LEVEL OF COVERAGE

A deposit of government securities must at all times contain sufficient securities, valued at their *current market value*, to complete decommissioning activities.<sup>14</sup> Therefore, at the time the trust fund, escrow account, or government fund is established, it must contain government securities with a market value at least as great as the licensee's current decommissioning cost estimate or certification amount. When submitting a deposit of government securities to NRC, a licensee should also submit documentation that verifies the amount in the trust fund, escrow account, or government fund (e.g., a receipt from the trustee, escrow agent, or State or State agency or an account balance statement). If the licensee's certification amount or estimated decommissioning cost increases to a level above the amount assured by the deposit of government securities, the licensee must either (1) deposit additional government securities to assure the higher amount or (2) obtain another financial assurance mechanism to make up the difference between the new coverage level and the amount of the deposit of government securities.

## 8.3 RECOMMENDED DOCUMENTATION

The terms and conditions of a deposit of government securities are governed by a written trust agreement or escrow agreement. The wording of a deposit of government securities may vary, but Sections 4.4 and 5.4 of this regulatory guide are a model trust agreement and a model escrow agreement that meet NRC's requirements and are recommended by the NRC. As summarized in Checklist 8-A, the following documentation is to be submitted when government securities are used.

- C A list of securities deposited with the trustee, escrow agent, or State or State agency (which should state their current market value and the date on which the securities were transferred to the fund or account).
- C The *trust agreement* or *escrow agreement* (along with all supporting documentation and any amendments) is the written document that specifies the terms and conditions of the deposit of government securities. The wording in the model trust and escrow agreements in Sections 4.4 and 5.4, respectively, is acceptable to the NRC staff. Licensees who wish to use other wording should

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<sup>14</sup> The exception to this rule is a deposit of government securities that is being combined with another financial mechanism. For a combination of mechanisms, the *sum* of the coverage provided by the mechanisms must be at least equal to the required coverage level.

use Checklists 4-B or 5-B to be sure that the alternative wording contains all the necessary terms and conditions.

- C Documentation specifying the licensee's certification amount or estimated cost of decommissioning.
- C A letter from the State or State agency stating that the fund's use will be restricted to covering the costs of decommissioning upon the licensee's default (needed only if the securities are held in a government fund).

## 9. SURETY BONDS

A *payment surety bond* (or *surety bond*) is a guarantee by a surety company (or surety) that it will fund decommissioning activities if the principal (i.e., the licensee) fails to do so. In issuing a surety bond, the surety company becomes “jointly and severally” liable for the guaranteed payment, meaning that the surety assumes the licensee’s obligation to fund decommissioning as its own and can be sued jointly with the licensee for the obligation. Consequently, most surety bonds include an indemnification provision that requires the principal to reimburse the surety for costs incurred in satisfaction of the principal’s obligations.

A surety bond used for decommissioning financial assurance must be open-ended or, if written for a specified term (such as five years), must be renewed automatically unless, 90 days or more prior to the renewal date, the surety notifies both NRC and the licensee of its intention not to renew. A surety bond must also provide that the full face amount of the bond be paid to the beneficiary automatically prior to expiration, without proof of forfeiture, if the licensee fails to provide a replacement mechanism acceptable to the NRC within 30 days after receipt of notification of cancellation.

Funds drawn from a surety bond must be placed directly into a “standby trust fund” if the licensee fails to conduct decommissioning as required. A standby trust fund is simply a trust fund that is not yet funded but is otherwise ready to accept monies in the event they are received from a particular source (such as a surety bond). Funds in the standby trust would then be available to pay the costs of decommissioning, just as they would with an ordinary trust fund. (See Section 17 for more information on standby trust funds.)

The remainder of this section discusses the primary criteria that determine whether particular surety bond submissions will be acceptable to NRC.

- c Section 9.1 describes qualifications required of the issuer (the surety company).
- c Section 9.2 addresses the adequacy of coverage.
- c Section 9.3 discusses the documentation that supports a surety bond.
- c Section 9.4 presents a model surety bond that NRC has found to be acceptable.

This section also contains two checklists that are designed to assist licensees who wish to use surety bonds. Checklist 9-A summarizes the primary criteria used by NRC to evaluate surety bonds. Checklist 9-B (which should be used only by licensees who revise or do not use the model wording for surety bonds) presents terms and conditions that are recommended for surety bonds.

## CHECKLIST 9-A

### SURETY BONDS

- 9 Documentation is complete:
  - 9 1. Surety bond (originally signed duplicate)
  - 9 2. Standby trust agreement and all supporting documentation (see Section 17 and attach Checklist 17-A)
  - 9 3. Copy of broker/agent's power of attorney authorizing the broker/agent to issue bonds
  - 9 4. Checklist 9-B (if model surety bond wording is modified or not used)
- 9 The surety company is listed in the most recent edition of *Circular 570* for the State in which the bond was signed and has an underwriting limitation greater than or equal to the amount of the bond being used for decommissioning.
- 9 The amount of the surety bond equals or exceeds the required coverage level.

## 9.1 QUALIFICATIONS OF THE ISSUER

To determine whether a surety company is qualified, licensees should consult the most recent edition of the U.S. Department of the Treasury's *Circular 570*, which is published annually on approximately July 1 and is updated periodically in the *Federal Register*. (*Circular 570* can also be found on the World Wide Web at <http://www.fms.treas.gov/c570/index.html>.) The surety must be listed in *Circular 570* as qualified in the State where the surety bond was signed, and the surety's underwriting limitation (also specified in *Circular 570*) must be at least as great as the level of coverage required for the license.<sup>15</sup>

Also, as noted above, a surety bond must be payable to a standby trust fund. Information on the qualifications of trustees of standby trusts is provided in Section 17.

## 9.2 LEVEL OF COVERAGE

A surety bond must be in an amount that is at least equal to the licensee's certification amount or estimated cost of decommissioning.<sup>16</sup> If the licensee's certification amount or estimated decommissioning cost increases to a level above the amount assured by the surety

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<sup>15</sup> A surety can only exceed its underwriting limitation if it brings another surety company into the agreement to share the risk. Nevertheless, several sureties acting together may not exceed the sum of their individual underwriting limitations.

<sup>16</sup> The exception to this rule is a surety bond that is being combined with another financial mechanism. For a combination of mechanisms, the *sum* of the coverage provided by the mechanisms must be at least equal to the required coverage level.

bond, the licensee must either (1) revise the surety bond to assure the higher amount or (2) obtain another financial assurance mechanism to make up the difference between the new coverage level and the amount of the surety bond.

### 9.3 RECOMMENDED DOCUMENTATION

As summarized in Checklist 9-A,<sup>17</sup> licensees who wish to use surety bonds to provide financial assurance for decommissioning submit a copy of the surety bond and other documentation as discussed below.

- C The *surety bond* (along with any riders or amendments) signed by an authorized representative from the surety company. The wording of a surety bond may vary, but Section 9.4 of this regulatory guide is a model surety bond that would meet NRC's requirements and is recommended by NRC. Licensees who wish to use other wording should refer to Checklist 9-B to be sure that the alternative wording contains all the necessary terms and conditions.
- C A *copy of the broker/agent's power of attorney* authorizing the broker/agent to issue bonds on behalf of the surety company. The power of attorney ensures that the surety bond is enforceable.
- C A *standby trust fund* must be established to receive funds from the surety bond. The standby trust fund should satisfy the criteria described in Section 17 and in Checklist 17-A of this regulatory guide.

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<sup>17</sup> Supporting documentation may differ for licensees who submit surety bonds that differ from the recommended model.

## CHECKLIST 9-B

### Terms and Conditions Needed in Decommissioning Surety Bonds

*Use this checklist only if deviating from the wording recommended in Section 9.4.*

- 9 Date of execution of bond and effective date.
- 9 Name and address of licensee.
- 9 Type of business organization and State of incorporation (if appropriate).
- 9 NRC license number, identification of licensed facility(ies) (name and address), costs or required decommissioning activities.
- 9 Identification of corporate or individual surety(ies):
  - 9 1. Name;
  - 9 2. State of incorporation; and
  - 9 3. Qualification in jurisdiction where facility covered by the surety bond is located.
- 9 Designation of obligee (NRC).
- 9 Recitation of consideration (fee paid for surety bond).
- 9 Liability of surety:
  - 9 1. Penal sum;
  - 9 2. Limitation of liability;
  - 9 3. Condition(s) of liability; and
  - 9 4. Statement of joint and several liability.
- 9 Statement of licensee's regulatory obligations as reason for bond.
- 9 Scope and duration of bond:
  - 9 1. Restricted to single obligation;
  - 9 2. Continuing;
  - 9 3. Provisions for renewal; and
  - 9 4. Payable to a standby trust fund.
- 9 Termination:
  - 9 1. By surety;
  - 9 2. By principal; and
  - 9 3. Effective date of termination or revocation.
- 9 The financial institution issuing the mechanism must notify the licensee and the NRC by certified mail at least 90 days prior to cancellation or nonrenewal.
- 9 An automatic payment provision must be included that, if the licensee is unable to secure alternative financial assurance to replace the bond within 30 days of notification of cancellation, the NRC may draw upon the bond prior to cancellation.
- 9 Adjustment of penal sum.
- 9 Liability limit of the bond.
- 9 Date.
- 9 Signatures.
- 9 Premium.

## 9.4 MODEL SURETY BOND

Date bond executed: \_\_\_\_\_

Effective date: \_\_\_\_\_

Principal: [Insert legal name and business address of licensee]

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 for decommissioning activities guaranteed by this bond: \_\_\_\_\_

Surety: [Insert name and business address]

Type of organization: [Insert “proprietorship,” “joint venture,” “partnership,” or “corporation”]

State of incorporation: \_\_\_\_\_ (if applicable)

Surety’s qualification in jurisdiction where licensed facility is located.

Surety’s bond number: \_\_\_\_\_

Total penal sum of bond: \$\_\_\_\_\_

Know all persons by these presents, that we, the Principal and Surety hereto, are firmly bound to the U.S. Nuclear Regulatory Commission (hereinafter called NRC) 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 U.S. Nuclear Regulatory Commission, 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 [insert 30, 40, 70, or 72], applicable to the Principal, which require that a license holder or an applicant for a facility 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 amounts identified above for the facility;

Or, if the Principal shall fund the standby trust fund in such amount after an order to begin facility decommissioning is issued by NRC of such assurance, within 30 days after the date a notice of cancellation from the Surety is received by both the Principal and the NRC, then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the NRC that the Principal has failed to perform as guaranteed by this bond, the Surety shall place funds in the amount guaranteed for the facility into the standby trust fund.

The liability of the Surety 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 hereunder exceed the amount of said penal sum.

The Surety may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the NRC 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 NRC, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the NRC and to the Surety 90 days prior to the proposed date of termination, provided, however, that no such notice shall become effective until the Surety receives written authorization for termination of the bond from the NRC.

The Principal and Surety 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 and no decrease in the penal sum takes place without the written permission of the NRC.

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

In Witness Whereof, the Principal and Surety 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.

Principal

[Signatures]

[Names]

[Titles]

[Corporate seal]

Corporate Surety

[Name and address]

State of incorporation: \_\_\_\_\_

Liability limit: \$\_\_\_\_\_

[Signatures]

[Names and titles]

[Corporate seal]

[For every co-surety, provide signatures, names and titles, corporate seal, and other information in the same manner as for the Sureties above.]

Bond Premium: \$\_\_\_\_\_

## 10. LETTERS OF CREDIT

A *letter of credit* is a formalized, written line of credit extended by a bank on behalf of a licensee. The credit may be used only by NRC and only to fund decommissioning in the event the licensee does not conduct decommissioning on its own. A letter of credit used to provide financial assurance for decommissioning must be irrevocable, meaning that it may not be canceled prior to its expiration date. Also, the arrangement requires that the licensee repay (with interest) any funds drawn from the letter of credit.

A letter of credit used for decommissioning financial assurance must be open-ended or, if written for a specified term (such as five years), must be renewed automatically unless 90 days or more prior to the renewal date, the issuing bank notifies both NRC and the licensee of its intention not to renew. A letter of credit must also provide that the full face amount of the credit be paid to the beneficiary automatically prior to expiration, without proof of forfeiture, if the licensee fails to provide a replacement mechanism acceptable to NRC within 30 days after receipt of notification of cancellation.

Funds drawn from a letter of credit must be placed directly into a “standby trust fund” if the licensee fails to conduct decommissioning as required. A standby trust fund is simply a trust fund that is not yet funded but is otherwise ready to accept monies in the event they are received from a particular source (such as a letter of credit). Funds in the standby trust would then be available to pay the costs of decommissioning, just as they would with an ordinary trust fund. (See Section 17 for more information on standby trust funds.)

The remainder of this section discusses the primary criteria that determine whether particular letter of credit submissions will be acceptable to NRC.

- C Section 10.1 describes qualifications required of the issuer.
- C Section 10.2 addresses the adequacy of coverage.
- C Section 10.3 discusses the documentation that supports a letter of credit.
- C Section 10.4 presents a model letter of credit that NRC has found to be acceptable.

This section also contains two checklists that are designed to assist licensees who wish to use letters of credit. Checklist 10-A summarizes the primary criteria used by NRC to evaluate letters of credit. Checklist 10-B (which should be used only by licensees who revise or do not use the model wording for letters of credit) presents terms and conditions that are recommended for letters of credit.

### 10.1 QUALIFICATIONS OF THE ISSUER

A bank issuing a letter of credit to a licensee should be a financial institution whose operations are regulated and examined by a Federal or State agency.

## CHECKLIST 10-A

### LETTERS OF CREDIT

- 9 Documentation is complete:
  - 9 1. Letter of credit (originally signed duplicate)
  - 9 2. Standby trust agreement and all supporting documentation (see Section 17 and attach Checklist 17-A)
  - 9 3. Checklist 10-B (if model letter of credit wording is modified or not used)
- 9 The financial institution is regulated by a Federal or State agency.
- 9 The amount of the letter of credit equals or exceeds the required coverage level.

C The word “National” in the title of a financial institution signals that the institution is *Federally regulated*, as do the words “National Association” or the initials “N.A.” following its title. To determine whether such a financial institution qualifies as an acceptable issuer of a letter of credit, licensees should contact the appropriate district office of the Office of the Comptroller of the Currency (OCC) and confirm that the institution is Federally regulated. The six district offices of the OCC, along with the States and territories under their jurisdiction, are as follows:

- Northeastern District Office (212-819-9860) -- CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT, District of Columbia, Puerto Rico, and Virgin Islands.
- Southeastern District Office (404-659-8855) -- AL, FL, GA, MS, NC, SC, TN, VA, and WV.
- Central District Office (312-360-8800) -- IL, IN, KY, MI, OH, and WI.
- Midwestern District Office (816-556-1800) -- IA, KS, MN, MO, NE, ND, and SD.
- Southwestern District Office (214-720-0656) -- AR, LA, NM, OK, and TX.
- Western District Office (415-545-5900) -- AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY, and Guam.

C The word “State” in the title of a financial institution signals that the institution is *State regulated*. U.S. branches of foreign banks are usually regulated by the State in which they are located. To determine whether a State-regulated financial institution qualifies as an acceptable issuer of a letter of credit, licensees should contact the applicable State banking authority and confirm that the institution is State regulated.

- C The titles of some financial institutions do not suggest that they are either Federally regulated or State regulated. In many such cases (but not all), these institutions are State regulated, as are many domestic branches of foreign banks.

Also, as noted above, a letter of credit must be payable to a standby trust fund. Information on the qualifications of trustees of standby trusts is provided in Section 17.

## 10.2 LEVEL OF COVERAGE

A letter of credit must be in an amount that is at least equal to the licensee's certification amount or estimated cost of decommissioning.<sup>18</sup> If the licensee's certification amount or estimated decommissioning cost increases to a level above the amount assured by the letter of credit, the licensee must either (1) revise the letter of credit to assure the higher amount or (2) obtain another financial assurance mechanism to make up the difference between the new coverage level and the amount of the letter of credit.

## 10.3 RECOMMENDED DOCUMENTATION

Licensees who use letters of credit to provide financial assurance for decommissioning must submit a copy of the letter of credit and other documentation as discussed below and summarized in Checklist 10-A:<sup>19</sup>

- C The *letter of credit* (along with any amendments) signed by an authorized representative from the issuing bank. The wording of a letter of credit may vary, but Section 10.4 of this regulatory guide is a model letter of credit that would meet NRC's requirements and is recommended by NRC. Licensees who use other wording should refer to Checklist 10-B to be sure that their wording contains all the necessary terms and conditions.
  
- C A *standby trust fund* must be established to receive funds from the letter of credit. The standby trust fund should satisfy the criteria described in Section 17 and in Checklist 17-A of this regulatory guide.

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<sup>18</sup> The exception to this rule is a letter of credit that is being combined with another financial mechanism. For a combination of mechanisms, the *sum* of the coverage provided by the mechanisms must be at least equal to the required coverage level.

<sup>19</sup> Supporting documentation may differ for licensees who submit letters of credit that differ from the recommended model.

## CHECKLIST 10-B

### Terms and Conditions Needed in Decommissioning Letters of Credit

*Use this checklist only if deviating from the wording recommended in Section 10.4.*

- 9 The instrument must be entitled an “irrevocable letter of credit.”
- 9 The name of the issuing financial institution must be identified on the letter of credit.
- 9 The letter should be limited in amount.
- 9 The letter of credit must contain a specified expiration date or be written for a definite term.
- 9 The issuer’s obligation to pay the beneficiary should arise only upon presentation of a draft or other documents specified in the letter of credit.
- 9 The letter of credit must be automatically renewed at each expiration date unless notification by certified mail is received by NRC and the licensee at least 90 days prior to nonrenewal.
- 9 An automatic payment provision must be included that if the licensee is unable to secure alternative financial assurance to replace the letter of credit within 30 days of notification of cancellation, the NRC may draw upon the letter of credit prior to cancellation.
- 9 Statement of licensee’s regulatory obligations as reason for the letter of credit.
- 9 The letter of credit must be payable to a standby trust.
- 9 Notice of insolvency or violation of banking requirements.
- 9 The bank must not be called upon to determine a question of fact or law at issue between the licensee and NRC.
- 9 The licensee should have an unqualified obligation to reimburse the issuer for payments made under the letter of credit.
- 9 Signature and title of officials of issuing institution (signature block).
- 9 Date (signature block).
- 9 Standards under which the letter of credit may be interpreted (i.e., Uniform Customs and Practice for Documentary Credits or Uniform Commercial Code).

## 10.4 MODEL LETTER OF CREDIT

### IRREVOCABLE STANDBY LETTER OF CREDIT NO. [insert number]

This Credit Expires [insert date]

Issued To: U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. \_\_\_\_ in your favor, at the request and for the account of [insert name and address of licensee] up to the aggregate amount of [insert dollar amount 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 the U.S. Nuclear Regulatory Commission."

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 [insert 30, 40, 70, or 72], which require that a holder of, or an applicant for, a materials license issued under 10 CFR Part [insert 30, 40, 70, or 72] provide assurance that funds will be available when needed for decommissioning.

This letter of credit is effective as of [insert date] and shall expire on [insert date at least 1 year later], but such expiration date shall be automatically extended for a period of [insert time period of at least 1 year] on [insert date] and on each successive expiration date, unless, at least 90 days before the current expiration date, we notify both you and [insert name of licensee], by certified mail, as shown on the signed return receipts. If [insert name of licensee] 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. The bank shall give immediate notice to the applicant and the NRC of any notice received or action filed alleging (1) the insolvency or bankruptcy of the financial institution or (2) any violation of regulatory requirements that could result in suspension or revocation of the bank's charter or license to do business. The financial institution also shall give immediate notice if the bank, for any reason, becomes unable to fulfill its 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 [insert name of licensee] 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 [insert amount of letter of credit].”

[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”].