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**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

December 30, 1999

**MEMORANDUM TO:** William F. Kane, Director, NMSS  
R. William Borchardt, Director, OE  
Paul H. Lohaus, Director, OSP  
Joseph R. Gray, Associate General Counsel  
for Licensing and Regulation, OGC  
David L. Meyer, Chief, RDB/DAS/ADM  
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Jesse L. Funches, CFO  
Cynthia A. Carpenter, Chief, RGE/DRIP/NRR  
Michael J. Case, Chief, PPRB/PMAS/NRR

**FROM:** John A. Zwolinski, Director *JAZ*  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

**SUBJECT:** RE-CONCURRENCE ON PART 50 RULEMAKING PLAN FOR  
RELEASING PART OF A REACTOR FACILITY OR SITE FOR  
UNRESTRICTED USE BEFORE RECEIVING APPROVAL OF THE  
LICENSE TERMINATION PLAN

By memo dated November 29, 1999, your concurrence was requested on the first draft of the attached rulemaking plan.

A meeting was held on December 15, 1999, with representatives from NRR, NMSS, and OGC to discuss changes to the draft. As a result, the rulemaking plan has been revised to more narrowly focus the rulemaking plan on Part 50 licensees. The reason for not recommending changes to Parts 30, 40, 70, and 72 was added to the discussion. The lead office for the rulemaking was changed to NRR.

Comments from reviewers were incorporated in the revised draft.

The following material summarizes this request:

1. Title: Release of Part of a Reactor Facility or Site
2. NRR Task Leader: Thomas L. Fredrichs, 301-415-*REG FILE CENTER COPY*
3. Cognizant Individuals: Larry Camper - NMSS  
James Lieberman - OGC  
Thomas Fredrichs - NRR
4. Requested Action: Office Concurrence on the revised Rulemaking Plan

*20000224*

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5. Requested Completion Date: January 4, 2000

Your concurrence is requested on the attached revised draft rulemaking plan.

Attachment: Commission Paper w/atts

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December 30, 1999

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Attachment: Commission Paper w/atts



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 30, 1999

REVISED D R A F T

FOR: The Commissioners

FROM: William D. Travers  
Executive Director for Operations

SUBJECT: RULEMAKING PLAN FOR RELEASING PART OF A REACTOR FACILITY OR  
SITE FOR UNRESTRICTED USE BEFORE RECEIVING APPROVAL OF THE  
LICENSE TERMINATION PLAN

PURPOSE:

To request Commission approval, by negative consent, to proceed with rulemaking for releasing part of a reactor facility or site for unrestricted use before receiving approval of the license termination plan (LTP) in accordance with the attached rulemaking plan.

BACKGROUND:

SECY-99-238, dated September 27, 1999, discussed the staff's response to the proposed sale of parts of the facility and site of the Oyster Creek Nuclear Generating Station (OCNGS). A number of actions, specific to the case at OCNGS, were taken to ensure that the property sold would meet the radiological release criteria of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20.

However, the staff concluded that current regulations in 10 CFR Part 50 do not provide for the release of part of a reactor facility or site for unrestricted use before approval of the LTP is received. In particular, the license termination criteria of 10 CFR 50.82 and 10 CFR Part 20, Subpart E, do not require a reactor licensee to demonstrate compliance with the radiological criteria for unrestricted use if a partial site release<sup>1</sup> is performed.

Contact: Tom Fredrichs, NRR/DLPM/PDIV-D  
301-415-1112

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<sup>1</sup> "Partial site release" is a shorthand reference for "releasing part of the reactor facility or site for unrestricted use before approval of the license termination plan."

In order to cover the regulatory gap in 10 CFR Part 50, the staff believes rulemaking is needed to provide for (1) radiological criteria applicable to a partial site release, (2) public participation, (3) potential synergistic dose effects, (4) an appropriate level of NRC oversight, and (5) efficient use of licensee and NRC resources.

Preliminary input from stakeholders was obtained on August 18, 1999, at the LTP Workshop sponsored by the Office of Nuclear Material Safety and Safeguards (NMSS). The proposed approach to handling the unrestricted release of part of a power reactor facility or site was presented to the attendees for comment. Utility and nuclear industry representatives indicated that licensees need a method to allow them to release parts of a site before approval of the LTP is received. Utility representatives believed that formal NRC action would be desirable to provide legal closure after part of a reactor site or facility is released. The rulemaking plan attached addresses issues raised at the workshop.

In SECY-99-238, the staff informed the Commission it would develop a rulemaking plan to provide for releasing part of a reactor facility and site for unrestricted use before a licensee receives Commission approval of its LTP. The rulemaking plan is presented in this paper.

#### DISCUSSION:

During the past year, licensees of operating and decommissioning power reactor plants expressed interest in releasing parts of their facilities and sites for unrestricted use before they received approval of their LTPs. Previously, reactor site boundaries rarely changed. The staff is aware of five reactor licensees that made site boundary changes between 1975 and 1994, consisting of four reductions and one expansion, ranging from ½ acre to 87 acres (see attachment 1). The NRC response ranged from no action to issuance of a license amendment requiring installation of iodine filtration equipment. (The largest change was an 87-acre reduction at the General Atomics TRIGA F reactor at Vallecitos, California. Because the site boundary was moved much closer to the reactor, iodine filtration equipment was required.) All the changes were made before the 1996 amendment of the reactor license termination rule in 10 CFR Part 50 and the 1997 issuance of radiological criteria for license termination in 10 CFR Part 20, Subpart E.

The NRC's experience indicates that a consistent regulatory method is needed to address the increasing interest in partial site releases at reactor sites. The staff believes the changes needed are procedural in nature. The technical issues involved in releasing land for unrestricted use have been previously evaluated for other rulemaking (the 1996 decommissioning rule amendment and the 1997 issuance of radiological criteria for license termination) and we do not need new methodology to address them. However, there is concern that synergistic dose effects could occur between parts of a site released before license termination and the remainder of the site as it exists when the license is terminated. The proposed rule will require records of partial site releases to assure that any such effects are considered at the time of license termination. The rulemaking plan includes funding to evaluate the likelihood that such synergistic effects can occur, and the final rule will consider the result of that evaluation.

A primary motivation for the proposed rule is that reactor sites often cover many acres of land that contain little or no radioactive material and readily meet the radiological release criteria for unrestricted use. These areas, in many cases, are not required for safety reasons or to satisfy

reactor siting criteria. The staff's intent is to provide a method, through rulemaking, for licensees to release that land for unrestricted use without imposing unnecessary regulatory burdens and without waiting for decommissioning and license termination.

The strategy for crafting the proposed rule is to narrow its applicability to Part 50 licensees. For reactor licensees, the regulatory oversight of a partial site release will depend on the amount of residual radioactivity present in the area to be released. Areas that are either non-impacted or contain residual radioactivity that is not distinguishable from background will be subject to a performance-based rule. The main feature of the proposed rule for these cases is that the licensee will compile evaluations already required in the regulations for changes to a reactor facility into a single notification document for NRC review. If the licensee performs the evaluations adequately, using existing guidance, the release will be approved. In cases where the area to be released contains some residual radioactivity that is distinguishable from background, the licensee will submit a license amendment application that contains its plan to demonstrate compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402. Regulatory guidance already exists to perform this demonstration. In both cases, public participation requirements and additional recordkeeping are proposed.

In contrast to the license termination process, the proposed rule will not require a license amendment in all cases to release property for unrestricted use. The staff believes this difference is justified for the following reasons. First, the license termination process was created to deal with the facility or site as a whole, which inevitably involves handling residual radioactivity above background levels, such as that found in plant systems. The proposed rule preserves the license amendment approach for those cases in which residual radioactivity that is distinguishable from background remains in the area after it is released, and requires that the dose meets the radiological criteria for unrestricted use. Second, for cases where the change does not adversely affect reactor safety and the area contains residual radioactivity that is not distinguishable from background, a license amendment is not required to adequately protect public health and safety. A performance-based rule with clearly defined criteria is sufficient. The NRC's oversight role in the second set of cases is to ensure that the licensee meets the criteria.

The proposed rule provides for public participation. The NRC will notice receipt of a licensee's proposal for a partial release and make it available for public comment. The NRC will also hold a public meeting in the vicinity of the site to discuss the licensee's notification or license amendment request, as applicable.

The proposed rule does not provide for releasing part of a facility or site for restricted use before receiving approval of the LTP. Current regulations require licensees to submit an LTP before they can use the radiological criteria allowed for license termination under restricted conditions. The staff does not propose to change that requirement, nor has any reactor licensee expressed interest in releasing property for restricted use.

The proposed rule will apply only to cases in which a reactor licensee intends to perform a partial site release before receiving approval of its LTP. When an LTP is submitted, a licensee can propose releasing its site in stages, if it desires to do that. The staff will evaluate the licensee's plan and approve it, if it is adequate, by license amendment. Once the LTP is approved, there is no longer any need for a separate regulatory mechanism for partial site releases.

The proposed rulemaking would make the following changes to 10 CFR Part 50:

- Add a new section, separate from the license termination process of §50.82, to address the release of part of a reactor facility or site for unrestricted use.
- Require notification in writing, but not a license amendment, for releases of property that contain residual radioactivity that is not distinguishable from background. The release will be approved if all the proposed criteria are met.
- Require a license amendment that contains a plan to demonstrate compliance with the radiological criteria for unrestricted use (25 mrem/yr and ALARA [as low as is reasonably achievable]) for releases of property that contain residual radioactivity that is distinguishable from background.
- Revise the LTP requirements to account for releases of property before approval of the LTP is received.
- Require the NRC to hold a public meeting to inform the public of the partial property release.
- Require additional recordkeeping of the acquisition and disposition of property included in the site.
- Add supporting definitions of key terms.

The proposed rulemaking would make the following change to 10 CFR Part 20:

- Include releasing part of a facility or site for unrestricted use within the scope of the radiological criteria for license termination.

The proposed rulemaking would make the following change to 10 CFR Part 2:

- Provide for informal hearings in accordance with Subpart L, if a hearing is conducted for the licensee's planned release for unrestricted use.

#### INTEGRATION WITH PART 50 DECOMMISSIONING RULEMAKING

The staff views partial site releases of power reactor facilities and sites as separate from decommissioning since the process can apply to operating as well as permanently shutdown plants. The rulemaking on the partial site release issue should proceed independently.

#### INTEGRATION WITH PARTS 30, 40, 70, AND 72

The staff considered recommending conforming changes to revise the license termination and decommissioning rules of Parts 30, 40, 70, and 72. However, due to the technical complexity of materials sites, the staff will address the issue at a later time.

## STAKEHOLDER INVOLVEMENT

The staff plans to hold stakeholder workshops prior to issuance of the final rule.

## COMPATIBILITY OF AGREEMENT STATE REGULATIONS

Under the "Policy Statement on Adequacy and Compatibility of Agreement State Programs," approved by the Commission on June 30, 1997, and published in the *Federal Register* on September 3, 1997 (62 FR 46517), Part 50 is classified as compatibility category "NRC." The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act or provisions of 10 CFR.

## COORDINATION

The Office of NMSS has no objections to the rulemaking plan. The Office of Enforcement has no objections to the rulemaking plan. The Office of the General Counsel has no legal objection to the rulemaking plan. The Office of the Chief Financial Officer has reviewed the Commission paper for resource implications and has no objection. The Office of the Chief Information Officer has reviewed the rulemaking plan for information technology and information management implications and concurs in it. However, the plan suggests changes in information collection requirements that may require submission to the Office of Management and Budget at the same time the rule is forwarded to the Office of the Federal Register for publication. The Office of State Programs has no objections to this rulemaking plan.

## RECOMMENDATION

I intend to proceed with the development of the attached rulemaking plan unless otherwise directed by the Commission within 10 days from the date of this paper.

William D. Travers  
Executive Director  
for Operations

Attachments: 1. Examples of Site Boundary Changes  
2. Rulemaking Plan



**Examples of Site Boundary Changes  
at Reactor Facilities**

Reactor Site	Date	Boundary Change	Notification to NRC	NRC Response
Yankee Rowe	01/20/75	Sell 0.54 acre to county for road widening. Land located in exclusion area.	Letter requesting authorization for sale pursuant to 10 CFR 50.59	RAI issued, date unknown. Authorization, if issued, not located in NUDOCS.
Plant Hatch	12/29/82	Sell 2 acres, about 1 mile from reactor, to a church for a cemetery.	Letter informing NRC of change in site boundary	No response found in NUDOCS.
Byron Station	06/17/87	Sell 1-1/3 acre, about a half mile from the reactor, to city for a water tower.	Letter informing NRC that FSAR will be updated to reflect sale	No response found in NUDOCS.
General Atomics TRIGA Reactor	11/18/88	Move boundary fence from 350 m to 100 m from reactor center (87 acres)	License amendment request dated 12/22/87	Issued amendment 11/18/88 to reduce distance from reactor to exclusion area boundary due to installation of an iodine filtration system
Calvert Cliffs	06/22/94	Licensee increased site boundary by including land purchased after issuance of operating license. Number of acres not identified.	License amendment request dated 9/22/92. Identified by licensee QA auditors.	Issued amendment 6/22/94. Revised TS figures.

**Rulemaking Plan**  
10 CFR Parts 2, 20, and 50

**RELEASING PART OF A POWER REACTOR SITE OR FACILITY  
FOR UNRESTRICTED USE  
BEFORE RECEIVING APPROVAL OF THE LICENSE TERMINATION PLAN**

**REGULATORY ISSUE**

In Part 50 of the Title 10 of the *Code of Federal Regulation* (10 CFR), the Commission has no provisions for releasing part of a power reactor site or facility for unrestricted use before the NRC approves the license termination plan (LTP) ("partial site release"). However, licensees of operating and decommissioning reactors have made plans to make such releases. Regulation is required to allow licensees to make partial site releases in accordance with criteria that will adequately protect the public health and safety.

**EXISTING REGULATORY FRAMEWORK**

Regulations contained in 10 CFR Parts 2, 20, and 50 will be discussed as they bear upon the issues of partial site release at a reactor facility. In 10 CFR Part 30, the Commission presents a method for partial site releases at materials facilities, although, as discussed below, its usefulness for reactors is limited.

**10 CFR Part 2, Subpart L, "Informal Hearing Procedures for Adjudications in Materials and Operator Licensing Proceedings"**

Informal hearing procedures are specified in 10 CFR Part 2, Subpart L.

Section 2.1201(a)(1) applies to materials licenses under Part 30 and would apply to the partial release of materials sites. Although it is not applicable to a reactor site, this provision is mentioned to note that the NRC has decided that Subpart L is appropriate for partial site releases that are allowed under current regulations.

Section 2.1201(a)(3) applies to requests for a hearing for amendments to a Part 50 license for licensees that have certified permanent cessation of operations and permanent removal of fuel from the reactor and permanently removed fuel from the Part 50 facility. It applies to decommissioning reactors that have either removed spent fuel from the site, or have placed it in an independent spent fuel storage installation licensed under Part 72.

No statement is made in Subpart L regarding its applicability to partial site releases at reactor sites. However, the staff believes that conditions in a part of a facility or site released for unrestricted use are equivalent to the conditions specified in §2.1201(a)(3), and that Subpart L is the appropriate level for hearings requested in response to an amendment for a partial site release. It should be noted that the proposed rulemaking will not require a license amendment for partial site releases that contain no residual radioactivity in the areas that are released, nor for those in which the licensee demonstrates that the level of residual radioactivity is not

distinguishable from background. Therefore, for cases in which there is no public dose attributable to the property released for unrestricted use, no opportunity to request a hearing will normally be available.

### 10 CFR Part 20, "Standards for Protection Against Radiation"

In 10 CFR Part 20, the Commission discusses standards for protection against radiation. These are applicable to reactor licensees as long as they hold a license. Subparts relevant to the partial site release issue are Subpart D ("Radiation Dose Limits for Individual Members of the Public"), Subpart E ("Radiological Criteria for License Termination"), and Subpart K ("Waste Disposal").

### 10 CFR Part 20, Subpart D, "Radiation Dose Limits for Individual Members of the Public"

The radiation dose limits for individual members of the public in 10 CFR Part 20, Subpart D, set the annual limit for an individual member of the public at 100 mrem/yr. However, that annual limit is modified by §20.1301(d), which incorporates the Environmental Protection Agency's (EPA's) environmental radiation standards of 25 mrem/yr whole body, 75 mrem/yr thyroid, and 25 mrem/yr to any organ. These doses apply to the fuel cycle, so they include dose from effluents and direct radiation from operations. If a part of a facility or site released for unrestricted use contains residual contamination, the resulting dose would be added into the sum to determine compliance with §20.1301(d). The EPA standard is applicable to a "real" person (NUREG-0543, page 7). The annual limit is further modified by §20.1302(b), which requires a licensee to demonstrate compliance with the annual dose limit by one of two methods: (1) the dose "to the individual likely to receive the highest dose from the licensed operation" does not exceed 100 mrem/yr (§20.1302(b)) or (2) the dose "from external sources" to an individual "continuously present in an unrestricted area" does not exceed 50 mrem/yr (§20.1302(b)(2)(ii)).

A licensee performing a partial site release must continue to comply with each of the public dose limits. As a practical matter, the licensee must demonstrate that moving its site boundary closer to the operating facility will not result in dose to a member of the public that exceeds the criteria of 10 CFR Part 20, Subpart D. For cases where the residual radioactivity of the partial site release dose is not distinguishable from background, the resulting public dose is just that from the facility. For the cases where residual radioactivity does exist in the area to be released for unrestricted use, the dose due to the release must be added to that from the facility to determine compliance with 10 CFR Part 20, Subpart D. Although licensees are not now required to comply with the radiological criteria for unrestricted use when performing a partial site release, the staff proposes to create that requirement through rulemaking. Because there are so many differing individual doses defined in the regulations, the question of which is limiting will depend on site-specific factors.

Two conclusions can be drawn from the variety of dose limits and demonstrations of compliance imposed on a licensee's actions. First, a partial site release for unrestricted use that contains residual radioactivity that is distinguishable from background may have to meet a standard lower than the radiological criteria of 10 CFR Part 20 Subpart E (25 mrem/yr and ALARA [as low as is reasonable achievable]). This is because the sum of the dose from the partial site release plus the dose from the reactor facility must meet the EPA's fuel cycle dose limit of 25 mrem/yr. Although an operating plant's offsite dose contributions from direct

radiation and effluent releases are normally quite low, site-specific evaluation is required to quantify them. This limitation does not exist when the license is terminated, since the plant no longer exists. Second, licensees may need to revise their demonstrations of compliance with the public dose limits to include the dose, if any, from a partial site release.

Before leaving Subpart D, it is worth noting the provision of §20.1301(e), which states, "The Commission may impose additional restrictions on radiation levels in unrestricted areas ... in order to restrict the collective dose." The staff concluded that the proposed rulemaking to codify a method to perform partial site releases does not require a backfit analysis. However, the Commission has the authority to impose reasonable additional dose restrictions on a partial site release regardless of the outcome of a backfit analysis. The proposed rule requires a reactor licensee to meet the criterion that residual radioactivity must not be distinguishable from background for a licensee to perform a partial site release without a license amendment. For areas where residual activity is distinguishable from background, a license amendment containing the licensee's plan to demonstrate compliance with 10 CFR 20.1402 is proposed as a requirement. The staff believes these requirements are within the Commission's authority to impose on an area that a licensee proposes to release for unrestricted use.

#### 10 CFR Part 20, Subpart E, "Radiological Criteria for License Termination"

Radiological criteria for license termination contained in 10 CFR Part 20, Subpart E, limit radiation exposure to the "average member of the critical group." The limit applicable to release for unrestricted use is 25 mrem/yr total effective dose equivalent (TEDE), with additional reductions consistent with the ALARA principle. The determination of ALARA in these cases explicitly requires balancing reduction in radiation risk with the increase from other health and safety risks resulting from the work done to decontaminate a site, such as deaths from transportation accidents that might occur if larger amounts of waste soil are shipped for disposal. The standard applies to doses resulting from "residual radioactivity distinguishable from background" and includes dose from groundwater sources of drinking water. Note that the standard for unrestricted use does not include dose from effluents or direct radiation from continuing operations. However, as noted in the section on public dose limits, because of differences in defining the dose, the controlling limit at any plant will depend on site-specific factors.

The scope of Subpart E applies to decommissioning reactor facilities. It does not apply to operating reactors. Once the operating license is issued, the licensee categorizes a reactor facility as operating or decommissioning. The reactor remains "operating" until such time as the licensee submits the certifications of permanent cessation of operations specified in 10 CFR 50.82(a)(1), when it becomes "decommissioning."

Section 20.1401(c) provides finality to the decommissioning process upon the Commission's termination of the license. Additional cleanup would be required only if new information revealed that the requirements of Subpart E were not met and a significant threat to public health and safety remained from residual radioactivity. This level of finality is not available to partial site releases because the license is still in effect.

Subpart E contains criteria for three categories of license termination. The requirements are tabulated below.

**10 CFR Part 20 Subpart E  
License Termination Criteria**

Criteria	Unrestricted Use	Restricted Conditions	Alternate Criteria
Dose	25 mrem/yr, reduced to ALARA	<ul style="list-style-type: none"> <li>• 25 mrem/yr, with controls</li> <li>• 100 mrem/yr, if controls fail, reduced to ALARA</li> <li>• 500 mrem/yr, if "durable" controls fail, reduced to ALARA</li> </ul>	<ul style="list-style-type: none"> <li>• 100 mrem/yr, "from all man-made sources, other than medical," with controls, reduced to ALARA</li> </ul>
Controls	None	Required	Required
Financial assurance	None	Required for control and maintenance of the site	None
License termination plan	None	Required	Required
Public participation	None	Required	Required
Commission approval to use criteria	None	None	Required

The proposed rulemaking is intended to apply Subpart E to reactor licensees that have not received approval of the LTP. Since an LTP is required for license termination under restricted conditions (§20.1403(d)) or alternate criteria (§20.1404(a)(4)), only the "unrestricted use" option will be available to licensees for a partial site release before receiving approval of the LTP.

The proposed rule does not require a demonstration that the area to be released meets the criteria of §20.1402 for cases where there is no residual radioactivity or it is not distinguishable from background. In these cases, there is no dose attributable to the area released, and no demonstration of compliance with §20.1402 is necessary.

For cases where there is some residual radioactivity distinguishable from background, the proposed rule requires a license amendment that includes a demonstration of compliance with §20.1402 for the area that is released for unrestricted use. Guidance on performing the demonstration was issued to support the issuance of 10 CFR Part 20, Subpart E, and it can be used to support a license amendment request for partial site release.

As noted in the section discussing 10 CFR Part 20, Subpart D, the dose, if any, from a partial site release would be added to the dose from direct radiation and effluent releases to determine continued compliance with §20.1301(d), the EPA limit on the fuel cycle.

### 10 CFR Part 20, Subpart K, "Waste Disposal"

Section 20.2002 of 10 CFR Subpart K allows a licensee to request Commission approval of a proposed disposal method. The staff does not believe §20.2002 is appropriate for the purpose of approving a partial site release. However, since the regulation applies to "proposed procedures, not otherwise authorized in the regulations in this chapter, to dispose of licensed material generated in the licensee's activities," it is possible for a licensee to invoke the regulation for a partial site release.

The staff does not consider the regulation applicable to partial site release because there is no well-developed staff position on the standards for evaluating applications submitted under the provisions of §20.2002. Therefore, use of §20.2002 would continue the case-by-case approach to the issue and could result in inconsistent application of safety standards.

The staff believes that by providing an authorized procedure through rulemaking, the proposed rule will put a partial site release outside the scope §20.2002, as it should be. The codification of the procedure will also lead to consistent application of safety standards.

### 10 CFR 20.1003, "Definitions"

#### "Site boundary"

In §20.1003, the Commission defines the site boundary as "that line beyond which the land or property is not owned, leased, or otherwise controlled by the licensee." There is no provision to restrict transfer of ownership of property in the regulations, provided that no transfer of licensed material is involved. One consequence of this definition is that the "site," which is licensed under 10 CFR Part 50 and is subject to the license termination and decommissioning requirements of §50.82 and 10 CFR Part 20, Subpart E, can be changed by selling the property.

Under one view, a licensee could sell property and not include it in its LTP, which would relieve the licensee of the requirement to demonstrate compliance with the radiological criteria for unrestricted use. Under a second view, the intent of the license termination rule is to assure that the entire site, as originally licensed, will be included in the LTP to assure that the full area meets the requirements of 10 CFR Part 20, Subpart E, at the time the license is terminated.

In the context of Part 50, the definition of site boundary is applied primarily for emergency planning purposes, to define the point at which offsite dose consequences are to be estimated for purposes of defining emergency action classes and making protective action measure recommendations. The site boundary is also often referred to in reactor plant technical specifications (TSs) for the purpose of defining the point at which effluents must meet the dose and concentration limits of 10 CFR Part 20.

The staff does not propose changing the definition of "site boundary." Rather, the proposed rule will revise §50.75(g) to require the licensee to maintain records of its site as originally licensed. Additional recordkeeping will be required to track changes in the site and preserve information about the radiological conditions of any partial site releases. When a licensee requests license termination, the earlier partial site releases, if any, will be included in the evaluation so that the entire site meets the criteria for license termination in 10 CFR Part 20,

Subpart E. These proposed requirements will clarify what area is included in the site for purposes of site release and eventual license termination.

**“Distinguishable from background”**

The term “distinguishable from background” is used several times in the proposed rule. Section 20.1003 states that the term means “that the detectable concentration of a radionuclide is statistically different from the background concentration of that radionuclide in the vicinity of the site or, in the case of structures, in similar materials using adequate measurement technology, survey, and statistical techniques.” The staff chose this definition to provide the criteria for requiring a notification of a partial release rather than a license amendment. If residual radioactivity remaining in the area to be released is not distinguishable from background, there is no dose attributable to the area released. Therefore, in these cases, if the licensee can demonstrate continued compliance with all other applicable regulatory requirements, public health and safety are adequately protected through the NRC’s review and approval of the licensee’s notification.

For cases where the area to be released contains some residual radioactivity that is distinguishable from background, the staff proposes to impose the requirements of §20.1402, the radiological criteria for unrestricted use. The licensee will be required to submit a license amendment application, which includes a plan to demonstrate compliance with §20.1402, to perform a partial site release in these cases.

**10 CFR 30.36, “Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas”**

Reactor licenses incorporate 10 CFR Part 30 to a limited extent so that a reactor licensee may possess, but not separate, such byproduct material as may be produced by the operations of the facility. Reactor licenses also reference 10 CFR Part 30 to allow receipt, possession, and use of byproduct material for use in sample analysis and instrument calibration. However, reactor licensees are not authorized by Part 50 to transfer byproduct materials generated from their special nuclear material.

In §30.36, the Commission specifies requirements applicable to byproduct materials licensees for the expiration and termination of licenses and decommissioning of sites, separate buildings, and outdoor areas. It requires the licensee to demonstrate compliance with the radiological criteria of 10 CFR Part 20, Subpart E. Parallel requirements are contained in §40.42 for source materials licensees, §70.38 for special nuclear material licensees, and §72.54 for independent spent fuel storage facilities. Unlike Part 50, these sections contain provisions for allowing part (“separate buildings and outdoor areas”) of a materials facility or site to be released for unrestricted use.

The sections listed above were issued on July 15, 1994, as part of the “timeliness in decommissioning” rule for materials facilities. The rule was issued to avoid long periods of delay in decommissioning materials facilities following cessation of operations. Unlike reactor facilities, where a period of safe storage can result in reduced occupational radiation exposure for decommissioning, materials facilities do not realize much dose reduction benefit from an extended period of storage. The difference is due to the predominance of long-lived nuclides present in the radioactive contamination at materials facilities.

Although §30.36 has provisions for releasing part of a facility or site for unrestricted use, it is not suitable for direct application to a Part 50 licensee because of differences in the decommissioning requirements applicable to reactors and materials facilities. Section 30.36 requires decommissioning to begin within 24 months of cessation of principal activities, even if only a part of the site is not used, whether or not a licensee declares an end to operations. In contrast, §50.82, the license termination rule for reactors, requires the licensee to certify the permanent cessation of operations before the decommissioning time clock starts. A reactor licensee has the option to begin decommissioning at any time following the submittal of certain certifications and reports, as long as it is completed within 60 years following permanent shutdown. Section 30.36 requires, under certain conditions, a decommissioning plan. Section 50.82 does not require a decommissioning plan, but always requires a post-shutdown decommissioning activities report and an LTP. The sections also differ in financial assurance requirements, public participation, the LTP, and the methods for approving the licensee's action.

The staff recommends that the methods of Part 30 (and the parallel methods in Parts 40, 70, and 72) not be used as the model for reactor facilities. In addition, due to the technical complexity of materials facilities, the staff does not recommend changes to the license termination and decommissioning rules of Parts 30, 40, 70, and 72 at this time.

#### 10 CFR 50.2, "Definitions"

##### "Decommissioning"

In §50.2, the Commission defines decommissioning as "to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license; or (2) release of the property under restricted conditions and termination of the license."

The staff believes that decommissioning, as defined, is not applicable to a partial site release for the following reasons. First, the definition allows both unrestricted and restricted release. The staff intends to limit the proposed rulemaking to unrestricted releases only. Second, partial releases will be available to operating plants, and thus, will not lead to termination of the license. The staff notes that a separate rulemaking on an integrated approach to decommissioning is under consideration. Changes in the definition of decommissioning are better handled by that effort.

##### Proposed Inclusion of Additional Terms

The staff issued technical guidance after the decommissioning rules of §50.82 were amended in 1996. Included in those documents was NUREG-1575, which defined terms (historical site assessment, impacted, and non-impacted) that are critical to implementing the amended regulations. In order for a licensee to adequately demonstrate compliance with the radiological criteria for license termination in 10 CFR Part 20, Subpart E, it must evaluate its site to identify areas of potential or known sources of radioactive material and classify those areas according to the potential for radioactive contamination. The evaluation is known as a *historical site assessment*. That assessment results in classifying areas according to the potential for containing radioactive material. An area classified as *impacted* has some potential for contamination, and must be surveyed (and perhaps remediated) in order to demonstrate



compliance with the release criteria. An area classified as *non-impacted* has no reasonable potential for contamination and need not be surveyed to demonstrate compliance with the radiological criteria for release. These definitions are not in §50.2. The staff proposes to add them, since the terms will be used in the proposed rulemaking.

#### 10 CFR 50.34, "Contents of applications; technical information"

In §50.34(a)(1)(ii)(D), the Commission requires reactor licensees to evaluate the offsite radiological consequences of postulated fission product releases. The requirements limit the maximum dose to no more than 25 rem TEDE in 2 hours for an individual on the boundary of the exclusion area. Maximum dose is also limited to 25 rem TEDE to an individual located at any point on the outer boundary of the low population zone who is exposed to a radioactive cloud resulting from the postulated fission product release during the entire period of its passage. The definitions of these boundaries, unlike the site boundary, do not depend on ownership of the land in question. Performing a partial release would not necessarily change the results of the licensee's evaluations of offsite consequences from a postulated release, but the details of the calculations would have to be checked to assure that the criteria continue to be met.

Section 50.34(a)(1)(ii)(D) also requires that reactor licensees comply with the siting criteria of 10 CFR Part 100. A number of non-seismic criteria would have to be reexamined to assure that they are met after performing a partial site release. The list of criteria is discussed below in the section on 10 CFR 100.21.

In §50.34(b), the Commission requires a final safety analysis report (FSAR) that "describes the facility." Along with other information, the size and location of the site will be found in the FSAR. However, the licensee can change the FSAR without NRC approval, after performing a safety evaluation that concludes that no unreviewed safety question exists as a result of the change. The change would be submitted to the NRC in accordance with §50.71(e). The FSAR update is required annually, or 6 months after a refueling outage, not to exceed 24 months, for operating plants. Decommissioning plants must submit updates every 24 months. The staff believes the routine submittal frequency is not timely enough to allow adequate NRC oversight of a partial site release.

#### 10 CFR 50.36, "Technical specifications"

In §50.36(c)(4), the Commission lists the requirements for including design features in a licensee's TSs. The "site" is not specifically mentioned, although, in practice, many reactor facilities contain a map of the reactor site in the "design features" section of their TSs. However, there is no regulatory requirement to describe the site in detail, nor include a map.

Guidance presented in standardized TSs suggest only a text description of the site need be included in the design features section. To the extent that the site is identified in the TSs, a licensee must obtain NRC approval before making a change, such as a partial site release. However, licensees have applied for and received approval of license amendments to remove site maps from their TSs. As a result, because the amended TSs contain a generalized site description that does not need revision when the site is changed, NRC approval would not be required to perform a partial site release.

### 10 CFR 50.36a, "Technical specifications on effluents from nuclear power reactors"

In §50.36a(a), the Commission requires reactor licensees to keep releases of radioactive materials to unrestricted areas ALARA. Licensees must submit an annual report on such releases. If the distance from the effluent release point to the unrestricted area changes as a result of a partial site release, the calculated dose to a member of the public may change. The proposed rule will require licensees to evaluate these changes before performing a partial site release to assure continued compliance with these requirements.

### 10 CFR 50.75, "Reporting and recordkeeping for decommissioning planning"

In §50.75(g), the Commission requires keeping records of information important to decommissioning. Currently, there are three categories of information required: (1) spills resulting in significant contamination after cleanup, (2) as-built drawings of structures and equipment in restricted areas, and (3) cost estimates and funding methods. The staff believes that information on structures and land that were included as part of the site is also important to decommissioning in order to assure that potential synergistic dose effects from partial releases are adequately accounted for when the license is terminated. The proposed rulemaking will require the licensee to identify the facility and site as originally licensed, to include a map, and to record any additions to or deletions from the site since original licensing, along with records of the radiological conditions of any partial site releases.

### 10 CFR 50.82, "Termination of license"

In §50.82, the Commission specifies the requirements a licensee must meet in order to enter the decommissioning phase and submit a request to terminate its license. Before entering the decommissioning phase, a licensee's access to the decommissioning trust fund is limited to no more than 3 percent of the total required by §50.75(c), and the money in the trust fund may be used only for decommissioning planning purposes. In order to terminate its license, the licensee must demonstrate compliance with the radiological criteria for license termination in 10 CFR Part 20, Subpart E.

The licensee's decision to enter the decommissioning phase is voluntary on the licensee's part. The steps to making the decision are specified in §50.82(a)(1). The first step is the licensee's decision to permanently cease operations at the site. There is no requirement to make this decision; however, once it is made, the licensee must submit a certification of permanent cessation of operations within 30 days. The second step is to submit a certification of permanent removal of fuel from the reactor vessel. There is no time limit for the second certification, but the licensee will continue to be subject to all requirements of Part 50 and be charged the full operating reactor license fees until both certifications are received. Once both are docketed, the licensee's 10 CFR Part 50 license authority to operate or retain fuel in the reactor is removed, Part 50 requirements that have no relevance to a permanently shutdown reactor (such as anticipated transients without scram) are removed, and the reactor facility has fully entered the decommissioning phase.

Some requirements of §50.82 apply to all power reactor licensees even before entering the decommissioning phase. In §50.82(a)(6), the Commission limits the decommissioning activities a licensee may perform to those that will permit release of the site for unrestricted use. In §50.82(a)(8)(ii), the Commission limits access to the decommissioning trust fund to no more

than 3 percent of the generic amount required by §50.75(c), and limits use of the funds to planning purposes only, until the licensee submits the certifications for §50.82(a)(1) and its post-shutdown decommissioning activities report (PSDAR). Both these requirements will remain unchanged. Thus, a partial site release, once the regulatory process to allow it is put in place, must be for unrestricted use and a licensee may not use decommissioning trust funds to perform the release unless it has made the certifications of §50.82(a)(1) and submitted its PSDAR.

The requirement of §50.82(a)(9) to submit an LTP does not apply to licensees that are not in the decommissioning phase. However, the LTP contains the information required by the NRC to evaluate the adequacy of the licensee's efforts to comply with the radiological criteria for license termination in 10 CFR Part 20, Subpart E. For unrestricted use, the criteria are 25 mrem/yr reduced to ALARA for all dose pathways combined. Thus, an operating plant licensee is not required to submit information on site characterization, site remediation (if needed), description of the end use of the site, or the final survey for a partial site release. Since the LTP is not required of a decommissioning plant until 2 years before the anticipated date of license termination, licensees may perform a partial site release before they are required to submit the necessary information. One should also note that the information required when the LTP is submitted refers to the "site." If a partial site release is performed before submittal of the LTP, and that part of the facility or site is no longer "owned, leased, or otherwise controlled by the licensee," the licensee would not be required to include the areas released because they no longer are part of the "site." Effectively, a partial site release could result in a licensee relinquishing responsibility for a part of its site without going through the license termination process.

In view of the gap in the regulations noted above, the staff proposes rulemaking to require identification of parts of the site released for unrestricted use before approval of the LTP to be included in the information listed in the LTP.

In §50.82(a)(9)(iii), the Commission requires the NRC to notice receipt of the LTP, make it available for public comment, and hold a public meeting in the vicinity of the site. These actions are in response to receipt of the LTP from the licensee. Because the licensee is not required to submit an LTP for a partial site release, these public participation requirements do not apply.

For a decommissioning plant, the LTP is approved by license amendment in accordance with §50.82(a)(10). The license amendment process provides an opportunity to request a hearing. However, because the licensee is not required to submit an LTP for a partial site release, the license amendment process is not invoked and there is no opportunity for the public to request a hearing.

The requirement to demonstrate compliance with the radiological criteria for license termination in 10 CFR Part 20, Subpart E, is not directly required of a licensee. Rather, §50.82(a)(11)(ii) requires the Commission to make a determination that the final survey and associated documentation provided by the licensee demonstrate that the "site" is suitable for release at the time the license is terminated. Two consequences follow from this regulatory mechanism. First, before the license is terminated, no demonstration of compliance with the radiological criteria of 10 CFR Part 20, Subpart E, is required. In particular, a licensee is not required to make such a demonstration for a partial site release performed before the LTP is submitted. Second, under current regulations, once a partial site release is made, and the property is sold

to another entity, the parts of the facility and site that were released are no longer required to be included in the definition of "site" and would not be included in the LTP when it is submitted. Therefore, the licensee would not be required to demonstrate compliance with the radiological criteria for license termination for a partial site release completed before its LTP was submitted at any time after the LTP is submitted. Combining the two consequences above yields the result that, under current regulations, there is no particular time at which a licensee must demonstrate compliance with the radiological criteria for license termination for a partial site release completed before its LTP is submitted.

In view of the gap in the regulations noted above, the staff proposes rulemaking to require partial site releases to be included in the documentation presented at the time of license termination to demonstrate compliance with the radiological criteria for unrestricted use. The documentation will allow the NRC to evaluate the existence of interactive or synergistic dose effects, if any, between areas released before the LTP was approved and the remainder of the site as it exists at the time of license termination.

#### Appendix I to 10 CFR Part 50, ALARA for reactor effluents

In Appendix I of 10 CFR Part 50, the Commission requires reactor licensees to provide reasonable assurance that certain design objectives will be met with regard to the estimated annual dose or dose commitment to any individual in an unrestricted area. The design objective dose from all pathways is limited to (1) 3 millirems to the total body or 10 millirems to any organ due to liquid releases and (2) 10 millirads for gamma radiation or 20 millirads for beta radiation for gaseous releases. Appendix I also contains a number of other design objectives. If the distance from the effluent release point to the unrestricted area changes as a result of a partial site release, the calculated dose to a member of the public may change. The proposed rule will require licensees to evaluate these changes before performing a partial site release to assure continued compliance with the design objectives.

#### 10 CFR 100.21, "Non-seismic siting criteria"

In §100.21, the Commission established a list of criteria that must be met by applications for reactor site approval. The evaluations demonstrating that a site met the criteria were based, in part, on the size as well as the location of the site. Performing a partial site release could potentially affect the results of the evaluations. The criteria that need to be reexamined to assure continued compliance with the requirements of §50.34(a)(1)(ii)(D) include (1) radiological effluent releases, (2) radiological dose consequences of postulated accidents, (3) potential hazards associated with nearby transportation routes, industrial, and military facilities, (4) security plan adequacy, and (5) emergency plans.

Regulator guidance exists for carrying out the necessary evaluations. In many cases, a change in the size of the site will not change the conclusions of the original siting approval. However, the details of the licensee's evaluations for site approval need to be checked to assure that the criteria continue to be met. The proposed rule will require the licensee to include the results of the reevaluations of the criteria to be submitted to the NRC prior to performing a partial site release.

**RULEMAKING OPTIONS**

**OPTION 1:** Maintain the status quo. Address proposals to release a part of a power reactor facility or site on a case-by-case basis.

**Advantage**

- No resources are required to perform rulemaking.

**Disadvantages**

- Lack of regulations applying to releasing a part of a power reactor facility or site for unrestricted use before approval of the LTP could result in inconsistent or unnecessary standards applied to licensees.
- Lack of regulations applying to releasing a part of a power reactor facility or site for unrestricted use may cause unnecessary industry and NRC resource expenditures in determining appropriate standards and process for each case.
- Lack of regulations applying to releasing a part of a power reactor facility or site for unrestricted use may allow licensees to take actions that adversely affect the ultimate decommissioning of the site.

**OPTION 2:** Proceed with a narrowly focused rulemaking to revise 10 CFR Parts 2, 20, and 50 to address partial site releases and provide generic communication to the industry on the staff's approach during the interim.

**Advantages**

- Provides clear regulation of partial releases for operating and permanently shutdown power reactor plants.
- Assures that the ultimate decommissioning of the site will not be adversely affected.
- Allows greater licensee and NRC efficiency for processing a partial site release.
- Allows guidance developed for decommissioning and license termination to be used for partial site releases.
- Provides for public participation in partial site releases.

**Disadvantages**

- Requires resource expenditure to develop rulemaking.
- Requires additional reporting and recordkeeping by licensees.

**OPTION 3:** Proceed with a broad scope rulemaking to revise 10 CFR Parts 2, 20, 30, 40, 50, 70, and 72 to address partial site releases.

#### Advantages

- Same as Option 2 for reactor licensees.
- Provides greater consistency for partial releases for all classes of licensees.

#### Disadvantages

- Resources to expand scope of rulemaking would be larger due to the larger number and diversity of stakeholders which includes Agreement States.
- The difference in timeliness required for decommissioning materials and reactor facilities would result in some difference in requirements for partial site releases in any case.
- Resolution of reactor licensee partial release proposals could be delayed due to the time required to address the greater complexity of including Parts 30, 40, 70, and 72 in the rulemaking.

### **RECOMMENDED APPROACH**

Option 2: Proceed with rulemaking to revise 10 CFR Parts 2, 20, and 50 to address partial site releases and provide generic communication to the industry on the staff's approach during the interim.

### **THE OFFICE OF THE GENERAL COUNSEL (OGC) ANALYSIS**

OGC has reviewed the rulemaking plan for any potential legal complications or known bases for a legal objection. OGC has not identified any Paperwork Reduction Act issues. OGC does not believe that this action constitutes a "major rule" pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, but, in accordance with Executive Director for Operations guidance, the rulemaking proposal will be submitted to the Office of Management and Budget (OMB) for verification of this position at the earliest point that sufficient information is available on which OMB can render its decision on NRC's determination. Backfit considerations related to this rulemaking plan are addressed in the following section. As the rulemaking plan points out, the rulemaking will require a regulatory analysis. In addition, the staff must prepare an environmental assessment pursuant to 10 CFR 51.21. In all other respects, OGC has not identified any potential legal complications or known bases for a legal objection to the proposed rulemaking.

### **BACKFIT CONSIDERATIONS**

In accordance with 10 CFR 50.109(a)(4), the staff's evaluation of the proposed revisions to 10 CFR Part 50 found that backfit analysis is not required because they comply with the exception criteria of 10 CFR 50.109(a)(4)(i) through (iii). The proposed revisions are required to bring a facility that performs a partial site release into compliance with the rules of the

Commission, is necessary to ensure adequate protection of public health and safety, or redefines the level of protection to public health and safety considered to be adequate. The staff will prepare a documented evaluation justifying this conclusion.

### **COMPATIBILITY OF AGREEMENT STATE REGULATIONS**

Under the "Policy Statement on Adequacy and Compatibility of Agreement State Programs" approved by the Commission on June 30, 1997, and published in the *Federal Register* on September 3, 1997 (62 FR 46517), Part 50 is classified as compatibility category "NRC." The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act or provisions of 10 CFR.

### **SUPPORTING DOCUMENTS**

This rulemaking would require a detailed regulatory analysis that the staff believes would show a benefit to licensees with no significant impact to the environment or public health and safety. The regulations would be amended to provide for making a partial site release. No backfit analysis would be needed but a documented evaluation will be prepared justifying this conclusion. An OMB clearance package will be needed because the rulemaking will impose new recordkeeping and reporting requirements. An environmental assessment would be necessary to demonstrate that there are no significant impacts to the environment and public health and safety.

### **SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT**

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC believes that this action is not a "major rule" and, before issuing the direct final rule, will verify this with the Office of Information and Regulatory Affairs, OMB.

### **RESOURCES**

The resource estimate to complete this rulemaking is approximately 3.0 FTE.

<u>Fiscal Year</u>	<u>FTE</u>
2000	0.5
2001	1.0
2002	<u>1.5</u>
Total	3.0

The amount of \$250,000 will be budgeted for technical assistance to determine if synergistic dose effects from part of the facility or site released before receiving approval of the LTP are so unlikely that reevaluation of parts released earlier would not be required at the time of license termination. If the results of this study indicate that no such effects can occur, the proposed changes to the LTP requirements may be revised.

**LEAD OFFICE STAFF AND STAFF FROM SUPPORTING OFFICES**

**Lead Office-Project Management**

NRR - TBD

**Supporting Offices**

NRR - (RGEB) - TBD

NRR - (DRCH) - TBD

NMSS - TBD

OGC - James Lieberman

ADM - D. Meyers

OSP - Paul Lohaus

**STEERING GROUP**

None. This rulemaking effort would not be expected to benefit from the use of a steering group.

**ENHANCED PUBLIC PARTICIPATION**

This rulemaking plan and any subsequently published proposed rule will be placed in the NRC's rulemaking website. This website allows users to submit comments electronically as well as to review comments submitted by others.

**EDO OR COMMISSION ISSUANCE**

This rulemaking will be issued by the Commission.

**SCHEDULE**

TO BE DETERMINED

Note: 7-14 days are required for OMB to determine if a full OMB review is required. If a full OMB review is required, we will submit a clearance package to OMB at the same time we forward the proposed rule to the Office of the Federal Register for publication.



## SUGGESTED CHANGES TO 10 CFR PART 50 FOR RELEASING PARTS OF A REACTOR SITE

Additions to existing regulations are indicated in redline. No deletions are considered necessary. Note that the language below is suggested for discussion purposes only. The proposed rule language can be expected to change based on stakeholder input and further staff evaluation.

### Sec. 2.1201 Scope of subpart

(a) \* \* \*

(4) The amendment of a Part 50 license to release part of a facility or site for unrestricted use in accordance with §50.83. Subpart L hearings for the partial site release plan, if conducted, must be complete before the property is released for use.

### Sec. 20.1401 General provisions and scope.

(a) The criteria in this subpart apply to the release of part of a facility or site for unrestricted use in accordance with §50.83 of this chapter and decommissioning of facilities licensed under Parts 30, 40, 50, 60, 61, 70, and 72 of this chapter, as well as other facilities subject to the Commission's jurisdiction under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended. For high-level and low-level waste disposal facilities (10 CFR Parts 60 and 61), the criteria apply only to ancillary surface facilities that support radioactive waste disposal activities. The criteria do not apply to uranium and thorium recovery facilities already subject to Appendix A to 10 CFR Part 40 or to uranium solution extraction facilities.

### Sec. 50.2

\* \* \*

*Historical site assessment* means the identification of potential, likely, or known sources of radioactive material and radioactive contamination based on existing or derived information for the purpose of classifying a facility or site, or parts thereof, as impacted or non-impacted.

*Impacted areas* are areas with some potential for residual contamination.

*Non-impacted areas* are areas with no reasonable potential for residual contamination.

\* \* \*

### Sec. 50.75 Reporting and recordkeeping for decommissioning planning

(g) \* \* \*

(4) Within 1 year of the effective date of this regulation, the licensee shall maintain records containing the following information:

- (i) Records of the site boundary, as originally licensed, which shall include a site map
- (ii) Records of any acquisition or use of property outside the originally licensed site boundary for the purpose of receiving, possessing, or using licensed materials
- (iii) The licensed activities carried out on such acquired or used property
- (iv) Records of the disposition of any property recorded in (4)(i) or (4)(ii), the historical assessment performed for the disposition, radiation surveys performed to support release of the

property, notifications submitted to the NRC in accordance with §50.83, and the methods employed to assure that the property met the radiological criteria of 10 CFR Part 20 Subpart E at the time the property was released.

#### Sec. 50.82 License Termination

(a)(9)(ii)(G) \* \* \*

(H) Identification of parts, if any, of the facility or site that were released for use before approval of the license termination plan.

\* \* \*

(11) \* \* \*

(ii) The terminal radiation survey and associated documentation demonstrate that the facility and site, including any parts released for use before approval of the license termination plan, are suitable for release in accordance with the criteria for decommissioning in 10 CFR Part 20 Subpart E.

#### Sec 50.83 Release of part of a facility or site for unrestricted use

(a) For power reactor licensees that release part of a facility or site for unrestricted use before receiving approval of a license termination plan

(1) Evaluate the effect of releasing the property to assure that

(i) The dose to individual members of the public does not exceed the limits of 10 CFR Part 20,

(ii) There is no reduction in the effectiveness of emergency planning or physical security,

(iii) Effluent releases remain within regulatory limits,

(iv) The environmental monitoring program and offsite dose calculation manual are revised to account for the changes, and

(v) The siting criteria of 10 CFR Part 100 continue to be met.

(2) Perform a historical site assessment of the part of the facility or site to be released

(3) For areas not classified as non-impacted, perform radiation surveys adequate to determine whether the area contains residual radioactivity that is distinguishable from background

(4) If the area is either non-impacted or contains residual radioactivity that is not distinguishable from background, notify the NRC in writing at least 180 days before releasing the property. The notification shall include

(i) The results of the evaluations performed in accordance with §§50.59, 50.83(a)(1), and 50.83(a)(2) of this chapter;

(ii) If radiation surveys were performed under the provisions of 50.83(a)(3) of this chapter, the methods used for and results obtained from the radiation surveys;

(iii) A description of the part of the facility or site to be released;

(iv) A supplement to the environmental report, pursuant to §51.53, describing any new information or significant environmental change associated with the licensee's proposed release of the property; and

(v) The schedule for release of the property.

(5) Within 180 days of notification by the licensee that it intends to release an area that is non-impacted or contains residual radioactivity that is not distinguishable from background, the NRC shall

(i) determine whether the licensee's proposed release of the property meets regulatory requirements;

(ii) determine whether the licensee's historical site assessment is adequate;

(iii) if the licensee has not performed a radiation survey, schedule a radiation survey of non-

impacted areas to assure that the licensee's conclusion that the area is non-impacted is adequate; and

(iv) upon determining that the licensee's notification is adequate, inform the licensee in writing that the release is approved.

(6) If the area contains residual radioactivity that is distinguishable from background, the licensee shall submit an application for amendment of its license for the release of the property. The application shall include

- (i) The information specified in §50.83(a)(4)(i) through (v) of this chapter and
- (ii) The licensee's plan to demonstrate compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402.

(7) The NRC shall notice receipt of the notification of release or license amendment application, as appropriate, and make the notification or license amendment application available for public comment. The NRC shall schedule a public meeting in the vicinity of the licensee's facility. The NRC shall publish a notice in the *Federal Register* and in a forum, such as local newspapers, which is readily accessible to individuals in the vicinity of the site, announcing the date, time, and location of the meeting, along with a brief description of the purpose of the meeting.