

## **RULEMAKING ISSUE AFFIRMATION**

December 20, 2002

SECY-02-0221

FOR: The Commissioners

FROM: William D. Travers  
Executive Director for Operations

SUBJECT: FINAL RULE TO STANDARDIZE THE PROCESS FOR ALLOWING A LICENSEE TO RELEASE PART OF ITS REACTOR FACILITY OR SITE FOR UNRESTRICTED USE BEFORE NRC HAS APPROVED ITS LICENSE TERMINATION PLAN

### PURPOSE:

To obtain Commission approval to publish a final rule in the *Federal Register* to standardize the process for allowing a power reactor licensee to release part of its reactor facility or site for unrestricted use before termination of the operating license. This type of release is called a "partial site release." The rule maintains assurance that residual radioactivity would meet the radiological criteria for license termination even if a licensee released parts of the site before license termination.

### SUMMARY:

The decommissioning and license termination rules of 10 CFR Parts 20 and 50 contain requirements to ensure that reactor facility decommissioning will be accomplished without undue impact on the public health and safety and the environment. The impact would arise from radioactivity remaining in structures, materials, soils, groundwater, and other media at a reactor site after the reactor license is terminated. Under current regulations, a reactor licensee may sell part of its site (i.e., obtain a partial site release) before it has applied the radiological criteria for license termination to the property (i.e., before it submits its license termination plan, or LTP). Several reactor licensees have expressed interest in selling parts of their sites before they receive approval of their LTPs. The NRC believes that partial release issues should be resolved generically. This rulemaking provides the requirements to be followed for a licensee to obtain NRC approval for a partial site release. The purpose of this rulemaking is to maintain the

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assurance that all contributors of residual radiation are appropriately considered at the time that the NRC approves the licensee's LTP.

#### BACKGROUND:

In the staff requirements memorandum (SRM) dated August 1, 2001, the Commission approved publication, with modifications, of a proposed rule in SECY-01-0083, "Proposed Rule to Standardize the Process for Allowing a Licensee to Release Part of Its Reactor Facility or Site for Unrestricted Use Before Receiving Approval of Its License Termination Plan." The proposed rule was published on September 4, 2001 (66 FR 46230), for a 75-day comment period that expired on November 19, 2001.

#### DISCUSSION:

The final rule (Attachment 1) adds a new section to 10 CFR Part 50, separate from the current decommissioning and license termination rules. The new section describes the criteria and the regulatory framework that a licensee must use to request NRC approval for a partial site release before NRC has approved of its license termination plan (LTP).

The rule focuses on licensees of operating and decommissioning power reactor plants. It does not pertain to materials or non-power reactor licensees, nor does it provide for releases under restricted conditions.

In order for the staff to evaluate the adequacy of the licensee's plans for partial site release, the rule requires licensees to submit information necessary to demonstrate the following:

- Compliance with the radiological criteria for unrestricted use of 10 CFR Part 20, Subpart E, Section 1402 (0.25 mSv/yr [25 mrem/yr] and as low as reasonably achievable).
- Continued compliance with all other applicable regulatory requirements that may be affected by the release of property and changes to the site boundary.
- That records of property line changes and the radiological conditions of partial site releases are being maintained to ensure that the dose from residual material associated with these releases can be accounted for at the time of any subsequent partial releases and at the time of license termination.

The approval process by which the property is released depends on the potential for residual radioactivity in the area. For proposed release areas classified as non-impacted and, therefore, having no reasonable potential for residual radioactivity, the staff can approve the release of the property by letter, provided the release of the property has no adverse effect on reactor safety. For areas classified as impacted and, therefore, having some reasonable potential for residual radioactivity, the rulemaking requires a licensee to submit release information in the form of a license amendment application. The amendment must include demonstration of the licensee's compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402 (0.25 mSv/yr [25 mrem/yr] to the average member of the critical group and as low as reasonably

achievable). In both cases, public participation requirements and additional recordkeeping are addressed.

Some reactor licenses may contain a license condition or a technical specification with a detailed description of the licensed site boundaries (e.g., a site map). When the licensed site area will change as a result of the release, licensees are required to submit a license amendment application regardless of the potential for residual radioactivity and regardless of the detail of the site area description.

As stated in the proposed rule, the staff determined that informal Subpart L hearings (under Part 2) are appropriate for hearings requested in response to an amendment for a partial site release. The final rule for partial site release adds a new paragraph to the existing § 2.1201(a) providing for informal hearings in accordance with Subpart L if a hearing is conducted for a licensee's planned release for unrestricted use. It is recognized that the Commission has approved with comment a proposed rule (SECY-00-0017) that would expand the use of informal hearing procedures to include amendments such as those for partial site releases. Because the proposed rulemaking of SECY-00-0017 will not be adopted as a final rule until some time in the future, the amendment to Part 2, Subpart L, is being retained in the final partial site release rule.

The rulemaking includes provisions for public participation. The staff will notice receipt of a licensee's proposal for a partial site release regardless of the potential for residual radioactivity and make the proposal available for public comment. The staff will also hold a public meeting in the vicinity of the site to discuss the licensee's request for approval or license amendment application, as applicable, and obtain comments before approving the release. The public meeting will be classified as a Category 3 meeting with the highest level of public participation in accordance with the policy statement, "Policy on Enhancing Public Participation in NRC Meetings," [67 FR 36920, May 28, 2002].

A final regulatory analysis, provided in Attachment 2, was developed to evaluate the need for, and the consequences of, the partial site release rulemaking.

A final environmental assessment, with a finding of no significant environmental impact, is provided in Attachment 3.

Eleven comment letters were received in response to the proposed rule (Attachment 4). Six were from nuclear power plant licensees (Exelon, Connecticut Yankee, Detroit Edison, Florida Power & Light, Maine Yankee, and Southern California Edison), three from State regulatory agencies (Connecticut, Illinois, and Washington), one from the Nuclear Energy Institute (NEI), and one from the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Workgroup.

In general, the comments were supportive of the proposed rulemaking. None of the commenters was opposed to the rulemaking. Several provided specific comments that were incorporated into the final rule.

The public comments along with the proposed responses are provided in the "Comments on the Proposed Rule" section of the *Federal Register* notice for the final rule (Attachment 1). The significant comments and associated responses are summarized here as follows.

Definition of "site boundary" in 10 CFR 20.1003

The term "site boundary" is defined in § 20.1003 as "that line beyond which the land or property is not owned, leased, or otherwise controlled by the licensee." NEI, Florida Power & Light, and Maine Yankee commented that the definition must be changed and clarifications added to the statements of consideration (SOC) in the final rule on the uses of "site" and "site boundary." In general, the commenters stated that licensees may own, lease, or control property that is not associated with licensed activities and such property should not be subject to the radiological release criteria of 10 CFR Part 20, Subpart E. The commenters provided various suggestions for a revised definition of "site boundary."

The proposed rule did not suggest changing the definition of "site boundary." Rather, it proposed revising 10 CFR 50.75(g) to require a licensee to maintain records of the licensed site. Specifically, the proposed rule required the maintenance of records of the site as originally licensed and any area acquired or used outside the originally licensed site boundary for the purpose of receiving, possessing, or using licensed materials, along with records of any disposition of property from this area. The purpose of these recordkeeping requirements is to clarify that the entire site (past and present) must be considered in meeting the intent of the license termination rule (LTR). As a result, the recordkeeping requirement also clarifies what site area is subject to the radiological release criteria for all Part 50 license holders.

In resolving the comment, the staff considered whether the site area to be considered in demonstrating compliance with the radiological release criteria in 10 CFR Part 20, Subpart E, should be the licensed site as stated in the proposed rule or the broader site area as defined in § 20.1003.

It could be argued that the broader definition is appropriate because the radiological release criteria in 10 CFR Part 20, Subpart E, is based on residual radioactivity. Residual radioactivity is defined in § 20.1003 as the radioactivity at a site resulting from activities under the licensee's control, including radioactivity from all licensed and unlicensed sources used by the licensee, but excluding background radiation. The definition further states that residual radioactivity includes radioactivity remaining at the site as a result of routine or accidental releases of radioactive material. By this definition, it can reasonably be argued that the area which must be considered subject to the radiological release criteria extends to all onsite areas with a reasonable potential for residual radioactivity, and it should make no difference if parts of this relevant area lie outside of the boundaries of the licensed site. Residual radioactivity could be found outside of the licensed "site boundary" in areas owned or otherwise controlled by the licensee as a result of routine effluent releases within regulatory limits, as well as unplanned releases, such as groundwater migration and stack releases.

However, the staff has concluded that the broader definition is not the appropriate area to be considered with respect to the release criteria for a number of reasons. First, as commenters pointed out, the terms "site" and "site boundary" are used in a number of contexts by licensees and in the Commission's regulations. However, the definition of "site boundary" was incorporated into 10 CFR Part 20 not to describe the area subject to the release criteria, but to support the concept of a controlled area. The sole use of the term in Part 20 is in the definition of a controlled area. There seems to have been no intent to use the term "site boundary," which does not

appear in 10 CFR Part 20, Subpart E, to redefine the boundaries of all sites. To apply the definition in § 20.1003 to the LTR could result in an overly broad definition of “sites.” Such a definition, would include areas owned or leased by licensees even if the property had no nexus to licensed activities and would be an unreasonable interpretation of the term. Also, for university and research reactors, medical/academic laboratories such as NIH, and other such facilities, the staff notes that using the broader definition adds complexity in defining the areas subject to the release criteria where the “campus” is contiguous to the licensed facility.

The staff believes that the appropriate area to be considered with respect to the release criteria is the licensed site. The licensed site area is where licensed activities are conducted and is the area addressed when the license is terminated. Any other area would not be appropriate for application of the license termination criteria. Additionally, NEI commented that, in practical terms, the LTR should apply to all properties directly associated with the use of licensed materials. Neither the Commission’s regulations nor the guidance documents researched by the staff provide a definitive description of what site area the release criteria are applicable to. However, in NUREG-1221, “Summary, Analysis, and Response to Public Comments on Proposed Amendments to 10 CFR Parts 30, 40, 50, 51, 70, and 72 - Decommissioning Criteria for Nuclear Facilities,” June 1988, one of the comments was that a definition of “site” should be given so that releases of uncontrolled areas can be more easily allowed. The response (NUREG-1221, Section G.22) was that the NRC license defines the boundary of the site and that anything outside this boundary is unrestricted. This response supports the argument that the specifics of the license define the area to which the release criteria apply, without regard to other definitions and uses of terms such as “site” and “site boundary.” Recently, the staff responded to a request to determine whether an intertidal zone bordering on the Maine Yankee site was within the site boundary and, therefore, subject to the license termination requirements. The opinion rendered was that the area in question was not part of the site because the site boundary for application of these requirements is defined by the description in the operating license which indicates that the area is not to be a part of the licensed site.

Based on these considerations, the final rule clarifies that the relevant site area to be considered in demonstrating compliance with the release criteria is the current and historic licensed site. Specifically, it is the site area as described in the original Part 50 license application and any property outside the originally licensed site boundary acquired for the purpose of receiving, possessing, or using licensed material at any time during the term of the license.

No changes to the rule are proposed as a result of this comment other than to change the term “site boundary” to “licensed site” in the recordkeeping requirements added to 10 CFR 50.75(g). This change avoids confusion with the site boundary definition in § 20.1003.

#### Dose contribution of residual material to the EPA’s environmental radiation standard

NEI and Maine Yankee disagree with statements in the proposed rule that the dose from released residual material is within the scope of the EPA’s environmental radiation standard incorporated in § 20.1301(d), and must therefore be combined with any other uranium fuel cycle-related doses in demonstrating compliance with the public dose limits of 10 CFR 20, Subpart D. The commenters stated that this position establishes a new policy position as written and constitutes a backfit if incorporated into the final rule.

The proposed rule stated that, if residual radioactivity exists in the area to be released for unrestricted use, the dose caused by the release must be considered along with the dose from the licensee's facility, as well as, for the case of the EPA's standard incorporated in § 20.1301(d), the dose from any other uranium fuel cycle operation in the area, for example a facility licensed under 10 CFR Part 72, to determine compliance with the dose standards. As a consequence, if a site contains residual radioactivity, a partial site release for unrestricted use may have to meet a standard lower than the radiological criteria of 10 CFR Part 20, Subpart E, because the combined dose from the partial site release and the dose from these other sources must meet the EPA's environmental radiation standard.

In resolving this comment, the staff contacted the NRR and NMSS technical reviewers of the proposed rule, who confirmed that the position, as stated in the proposed rule with regard to 40 CFR Part 190, remains technically valid. The staff concluded that its position on the relationship between 10 CFR Part 20, Subparts D and E, and EPA's requirements in 40 CFR Part 190 does not constitute a new policy and, therefore, does not require a backfit analysis in accordance with 10 CFR 50.109. Neither the NRC nor EPA had reason in the past to explain how the regulations at 40 CFR Part 190 would be interpreted and applied to partial site releases since NRC regulations did not provide for partial site releases until the present rulemaking effort. Consequently, no agency position or guidance exists on which to base a backfit claim. Additionally, partial site releases are actions voluntarily initiated by licensees. Therefore, the NRC is not imposing a regulatory position on any licensee, and the backfit rule does not apply. The staff believes that its interpretation of the applicability of EPA's regulations in 40 CFR Part 190 is consistent with the underlying objective of the requirements, that the dose be based upon the contribution of *all* radioactive material and sources attributable to the nuclear fuel cycle operations, regardless of the licensing status of the radioactive materials or the land on which they are located. No changes to the final rule are proposed as a result of this comment.

#### Partial releases following NRC approval of the LTP

The scope of the partial site release rule is limited to cases in which a reactor licensee requests NRC approval for a partial release prior to NRC approval of the LTP. Florida Power & Light and NEI disagreed with the statement in the proposed rule that, after an LTP has been approved, there is no longer any need for a separate regulatory mechanism for partial releases. They noted that a significant amount of time may pass between approval of the LTP and license termination, and that licensees should retain the option of pursuing a partial release even after the LTP has been approved without having to revise the LTP by amendment (which might involve a hearing).

The response to this comment states that the purpose of the statement in the proposed rule that there is no longer any need for a separate regulatory mechanism for partial site releases after the LTP is approved by license amendment was to clarify the difference between the proposed partial site release process and the LTP change process. The partial site release rule only applies to partial site releases that take place prior to approval of a licensee's LTP. After the LTP has been approved, partial site releases (as subsequent revisions to the LTP) would require NRC approval via license amendment unless the LTP contains a sufficient change process or describes staged releases of the property prior to license termination. Thus, the rule does not need to address a partial site release following approval of an LTP, because this type of partial release would be governed by the LTP or changes thereto. The staff intends to issue guidance on the LTP change

process in the upcoming revision of NUREG-1700, "Standard Review Plan for Evaluating Nuclear Power Reactor License Termination Plans." No changes to the final rule have been made in response to this comment.

#### Summary of other public comments

The final rule includes responses to the following other public comments:

- During concurrence reviews of the proposed rule, the technical basis for a distinguishability-from-background criterion for releasing impacted but remediated areas was questioned and the criterion was subsequently deleted from the proposed rulemaking. Connecticut Yankee commented that the final rule should restore distinguishability-from-background as a release criterion for impacted areas. The Illinois Department of Nuclear Safety also disagreed with NRC's reasoning for deleting the distinguishability-from-background criterion from the proposed rule. The comment response reiterates the position presented in the proposed rule that the lack of a technical basis prevents incorporating the criterion into the regulations.
- The Illinois Department of Nuclear Safety is opposed to adherence to the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) guidance which relies on a historical site assessment and does not require radiation surveys of areas classified as non-impacted. The comment response states that the rule will not specifically require the performance of radiological surveys for non-impacted areas. However, the response describes the conditions for which MARSSIM recommends additional surveys for demonstrating that a proposed release area is non-impacted.
- The Connecticut Department of Environmental Protection stated that the public meetings for telling stakeholders of NRC decisions are not a participatory process and, at the very least, the rulemaking should provide for mandatory public hearings. The comment response describes the conditions for which a hearing opportunity may be provided but does not propose mandatory public hearings. The response also describes the agency's revised policy on enhancing public participation in NRC meetings and refers to the petition process under 10 CFR 2.206.
- The MARSSIM Workgroup commented that the definitions of "Impacted Area" and "Non-impacted Area" added to 10 CFR 50.2 should be modified to agree verbatim with the definitions provided in the MARSSIM glossary. The comment response provides the justifications for retaining the definitions as presented in the proposed rule.
- Florida Power & Light recommended incorporating a doctrine of finality for partial site releases and license termination by amending 10 CFR 20.1401(c) to indicate that after a site has been decommissioned and the license terminated, or after part of a site has been released for unrestricted use, the Commission's jurisdiction ends and the Commission will not require additional cleanup. The comment response states that the desired finality of a release is not adversely impacted by the provisions in 10 CFR 20.1401(c), and explains that eliminating the provisions for additional cleanup when a significant public risk may exist could have a negative impact on public health and safety and would degrade public

confidence in the license termination process. As with the language in the Statements of Consideration for the LTR, the response does not define “significant” health risk.

- The Illinois Department of Nuclear Safety commented that the proposed rule is silent with regard to participation by State regulatory agencies and would like the rule amended to include explicit provisions for “hands on” State participation. Also, State participation would be important in the event that portions of the property to be released were transferred to State ownership and/or control. The comment response states that there is no need for the rule to incorporate participation by State regulatory agencies in the release process. The response refers to the existing policy statement that allows State officials of host and adjacent States to accompany the NRC on inspections and, under certain circumstances, enables States to enter into instruments of cooperation that allow States to directly participate in regulatory activities such as NRC inspection activities.
- Southern California Edison commented on the impacts of not having definitive standards for clearance of materials. The comment response states that the Commission is currently examining its approach for control of solid materials and that the points raised in the comments will be considered as part of the Commission’s review of alternative approaches.
- NEI and one reactor licensee commented that some licensees have expressed a desire to have the option of using the license amendment approach even for non-impacted areas to provide additional assurance to future owners. The comment response states that there is no need to provide this option because the staff has determined that these approvals are not amendments to licenses pursuant to the analysis in *Cleveland Electric Illuminating, et al.* (Perry Nuclear Power Plant, Unit 1), CAI-96-13, 43 NRC 315,328 (1996). The NRC’s oversight role in these cases is essentially to confirm that the licensee complies with the clearly defined criteria in the rule. Allowing a licensee to seek a license amendment for release of non-impacted areas would also decrease the efficiency and effectiveness of the staff’s review process.

#### COORDINATION:

The Office of the General Counsel has no legal objection to this rulemaking. The Office of the Chief Financial Officer has reviewed this Commission paper for resource implications and has no objections. This final rule has been reviewed by the Committee To Review Generic Requirements (CRGR) and the CRGR had indicated that it has no objection to its publication. The Advisory Committee on Nuclear Waste (ACNW) has been informed about the final rule and has no objections. The Office of the Chief Information Officer has reviewed the rule for information technology and information management implications and concurs in it. The Office of Management and Budget (OMB) has approved the information collection requirements.

#### RECOMMENDATION:

That the Commission:



1. *Approve* the attached notice of final rulemaking for publication in the *Federal Register* (Attachment 1).
2. *Certify* that the final rule does not have a significant financial impact on a substantial number of small entities. This certification is included in the attached *Federal Register* notice.
3. *Note*:
  - a. That the Chief Counsel for Advocacy, Small Business Administration, will be informed of the certification regarding economic impact on small entities and the reasons for it, as required by the Regulatory Flexibility Act.
  - b. That a final Regulatory Analysis has been prepared for this rulemaking (Attachment 2).
  - c. That a final Environmental Assessment has been prepared for this rulemaking (Attachment 3).
  - d. That the staff has determined that this is not a “major” rule, as defined in the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. 804(2), and has confirmed this determination with OMB.
  - e. That the appropriate congressional committees will be informed of this action.
  - f. That a press release will be issued by the Office of Public Affairs when the rulemaking is filed with the Office of the Federal Register.
  - g. That copies of the *Federal Register* notice of final rulemaking will be distributed to all power reactor licensees. The notice will be sent to other interested members of the public upon request.

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William D. Travers  
Executive Director for Operations

Attachments:

1. *Federal Register* Notice
2. Regulatory Analysis
3. Environmental Assessment
4. Public Comments on the Proposed Rule

***ATTACHMENT 1***

***FEDERAL REGISTER NOTICE***

**NUCLEAR REGULATORY COMMISSION**

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

**RIN 3150 - AG56**

**Releasing Part of a Power Reactor Site or Facility for Unrestricted Use  
Before the NRC Approves the License Termination Plan**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Final rule.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) is amending its regulations to standardize the process for allowing a power reactor licensee to release part of its facility or site for unrestricted use before the NRC approves the license termination plan (LTP). This type of release is termed a “partial site release.” The rule identifies the criteria and regulatory framework that a licensee would use to request NRC approval for a partial site release and provides additional assurance that residual radioactivity would meet the radiological criteria for license termination, even if parts of the site were released before license termination. The rule also clarifies that the radiological criteria for unrestricted use in 10 CFR 20 apply to a partial site release.

**EFFECTIVE DATE:** (Insert date 6 months (plus 30 days) after the date of publication), for § 50.75(g)(4). All remaining sections will be effective on (Insert date 30 days after the date of publication).

**ADDRESSES:** The final rule and any related documents are available on the NRC’s rulemaking Web site (<http://ruleforum.llnl.gov/>). For information about the interactive rulemaking Web site,

contact Carol Gallagher, 301-415-5905 (electronic mail: [cag@nrc.gov](mailto:cag@nrc.gov)). Copies of certain documents related to this rulemaking may be examined at the NRC Public Document Room, 11555 Rockville Pike, Rockville, MD. Documents are also available electronically at the NRC's Public Electronic Reading Room on the Internet (<http://www.nrc.gov/reading-rm.html>). From this site, the public can gain entry into the NRC's Agency Document Access and Management System (ADAMS) that provides text and image files of NRC's public documents. For more information, contact the NRC Public Document Room (PDR) Reference staff at 301-415-4737 or toll-free at 1-800-397-4209, or by e-mail at [pdr@nrc.gov](mailto:pdr@nrc.gov).

**FOR FURTHER INFORMATION CONTACT:** Mr. Harry Tovmassian, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001; telephone: 301-415-3092; or by e-mail to [hst@nrc.gov](mailto:hst@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

Compliance with the decommissioning and license termination rules of 10 CFR Parts 20 and 50 ensures adequate protection to the public and the environment from any radioactivity remaining in the facility and site when the reactor license is terminated. The NRC staff makes its determination that the licensee has met the license termination criteria using information submitted by the licensee in its license termination plan (LTP) and final radiation survey. The LTP is required no later than 2 years before the anticipated date of license termination. The license

termination radiation survey is required after the licensee completes its decontamination activities. These requirements were based on the NRC's anticipation that reactor licensees would permanently cease operations and then perform the decommissioning and license termination of the site as one project. However, in 1999, a licensee informed the staff that it intended to sell parts of its facility and site before it permanently ceased operations. As a result, the staff was faced with the need to evaluate the adequacy of the licensee's proposed action before the licensee was required to submit the information required by the license termination rule (LTR) and the final radiation survey.

In evaluating the staff's response to the proposed sale of parts of the licensee's facility and site, a number of actions specific to the case were taken to ensure that the property would meet the radiological release criteria for unrestricted use of 10 CFR Part 20, Subpart E.

However, the NRC recognized that the current regulations in 10 CFR Part 50 do not specifically address the release of part of a reactor facility or site for unrestricted use, or require a licensee to obtain NRC approval of a partial site release. Thus, there is no specific requirement to meet the release criteria under 10 CFR Part 20, Subpart E, for a partial site release.

The purpose of the License Termination Rule (LTR) [61 FR 39301; July 29, 1996, as amended at 62 FR 39091; July 21, 1997] and 10 CFR 50.82 is to ensure that the residual radioactivity for the licensed activity is within the criteria of the LTR. To avoid licensees taking a piecemeal approach to license termination, the LTP must consider the entire site as defined in the original license, along with subsequent modifications to the licensed site, to ensure that the entire area meets the radiological release requirements of 10 CFR Part 20, Subpart E, at the time the license is terminated. This approach is consistent with the intent of the LTR to consider the whole site for application of the release criteria. The rule clarifies this intent and does not establish new policies or standards. Although no further surveys of previously released areas are anticipated,

the dose assessment in the LTP must account for possible dose contributions associated with previously released areas in order to ensure that the entire area meets the radiological release requirements of 10 CFR Part 20, Subpart E, (0.25 mSv/yr [25 mrem/yr] reduced to as low as reasonably achievable [ALARA]) at the time the license is terminated. The requirement that licensees maintain records of property line changes and the radiological conditions of partial site releases ensures that these potential dose contributions can be adequately considered at the time of any subsequent partial releases and at the time of license termination. Draft NUREG-1757, Volume II, "Consolidated NMSS Decommissioning Guidance: Characterization, Survey, and Determination of Radiological Criteria," was published for public comment on September 26, 2002. When finalized, this document will provide guidance that may assist licensees in identifying and accounting for these potential dose contributions.

The rule, therefore, provides adequate assurance that residual radioactivity from licensed activities that remains in areas released for unrestricted use will meet the radiological criteria for license termination. It should increase public confidence in decisions to release parts of reactor sites and make more efficient use of NRC and licensee resources.

### **Discussion**

The strategy for developing this rulemaking was to narrow its applicability to power reactor licensees to be responsive to current industry needs while also protecting the health and safety of the public. A separate rulemaking would be needed to address the wide variety of materials sites, many of which are technically more complex from a decommissioning perspective than reactor sites, to provide a uniform and consistent agency approach to partial site release. The rule requires NRC approval for a partial site release for unrestricted use at a reactor site before NRC

approval of the licensee's LTP. Partial releases for restricted use are not permitted prior to LTP approval. Partial releases following LTP approval would be governed by the LTP or changes thereto.

The approval process by which the property is released depends on the potential for residual radioactivity from plant operations remaining in the area to be released. First, for proposed release areas classified as *non-impacted* and, therefore, having no reasonable potential for residual radioactivity, the licensee would be allowed to submit a letter request for approval of the release containing specific information for NRC approval. In these cases, as there is no reasonable potential for residual radioactivity, NRC would approve the release of the property by letter upon determining that the licensee has otherwise met the criteria of the rule and provided that a change to a license or technical specifications description of the site is not necessary. Guidance for demonstrating that a proposed release area is *non-impacted* is contained in NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)." NRC would generally not perform radiological surveys and sampling of a non-impacted area. NRC will, however, determine whether the licensee's classification of any release areas as non-impacted is adequately justified. Should NRC determine that confirmatory surveys and sampling are needed, such would be done as part of NRC's inspection process.

Second, for areas classified as impacted and, therefore, having some reasonable potential for residual radioactivity, the licensee would submit the required information in the form of a license amendment for NRC approval. The license amendment application would also include the licensee's demonstration of compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402. In both cases, public participation requirements and additional recordkeeping are addressed.

In contrast to the license termination process, the rule does not require a license amendment to release property for unrestricted use in all cases. The NRC 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, such as that found in plant systems. The rule preserves the license amendment approach for those cases in which the potential exists for residual radioactivity and requires that the area meets the radiological criteria for unrestricted use. Second, for cases in which the change does not adversely affect reactor safety and it is demonstrated that the area is non-impacted and, therefore, there is no reasonable potential for residual radioactivity, a license amendment is not required to adequately protect the public health and safety. The rule with its clearly defined criteria would be sufficient for the NRC to confirm a licensee's compliance with the partial site release rule. The NRC's oversight role in these cases is to ensure that the licensee meets the relevant criteria.

The rule amends 10 CFR Part 2 to provide an opportunity for a Subpart L hearing if the release involves an amendment. The hearing, if conducted, must be completed before the property is released for use. However, as noted above, for cases where it is demonstrated that the area is non-impacted and, therefore, there is no reasonable potential for residual radioactivity, a license amendment is not required by the rulemaking. A review of a licensee's proposed partial site release in such cases is essentially a compliance review to determine if the release would otherwise meet the defined criteria of the regulation. Assuming the partial site release does not result in a change to an existing license, the approval of the partial site release under these circumstances does not require a license amendment (see *Cleveland Electric Illuminating, et al.* (Perry Nuclear Power Plant, Unit 1), CLI-96-13, 44 NRC 315, 328 (1996)). In these cases, the opportunity to comment on the licensee's proposal for a partial site release, and the required



public meeting held before the release approval is granted will serve as forums for public comment on the proposed release.

In some cases, a reactor or site-specific Independent Spent Fuel Storage Installation (ISFSI) license may contain license conditions or Technical Specifications that define the licensed site in detail, such as a site map. In these cases, if the partial site release would change the licensed site as described, a reactor licensee would be required to submit a license amendment application for the release regardless of the potential for residual radioactivity in the area to be released. However, under current regulations, a licensee could amend its license to remove the licensed site definition, without reference to a partial site release, and then proceed to perform the release, without obtaining NRC approval. The rule requires NRC approval for a partial release from the licensed site regardless of the amount of detail defining the site in the operating license.

The rule provides for public participation. The NRC will notice receipt of a licensee's proposal for a partial site release, regardless of the potential for residual radioactivity, and make it available for public comment. Notwithstanding the opportunity for a hearing if a license amendment is involved, the NRC also will hold a public meeting in the vicinity of the site to discuss the licensee's request for letter approval or license amendment application, as applicable, and obtain comments before approving the release. The NRC has issued a policy statement, "Policy on Enhancing Public Participation in NRC Meetings" [67 FR 36920, May 28, 2002]. This policy statement provides a revised policy that the NRC will follow in opening meetings to public observation and participation. The revised policy is discussed in the Comments on the Proposed Rule.

Some commenters have expressed concern that a licensee could use a series of partial site releases to avoid applying the criteria of the license termination rule. Members of the public are concerned that the lack of a specific regulation for partial site releases could result in

inconsistent application of safety standards and insufficient regulatory oversight of licensee actions. They also note that the public participation requirements of the license termination rule do not specifically apply to a partial site release. The rule addresses these concerns.

The rule does not permit a partial site release under restricted conditions prior to NRC approval of the LTP, nor has any reactor licensee expressed interest in releasing property for restricted use. Any partial release for restricted use would be handled on a case-by-case basis through application of an exemption process.

The partial site release rule makes the following changes to 10 CFR Part 50:

1. Adds 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 before the LTP is approved.
2. Prohibits release for restricted use prior to LTP approval.
3. Specifies criteria for the licensee to fulfill to obtain NRC approval of a partial site release.
4. Allows a written request for release approval and does not require a license amendment for releases of property if the licensee demonstrates that the area is non-impacted and, therefore, there is no reasonable potential for residual radioactivity in the area to be released. The release would be approved upon NRC determination that the licensee has met the criteria of the rule.
5. Requires a license amendment that contains the licensee's demonstration of compliance with the radiological criteria for unrestricted use (0.25 mSv/yr [25 mrem/yr] and ALARA) for releases of property in which the area is classified as impacted and, therefore, some reasonable potential for residual radioactivity in the area to be released exists.

6. Revises the LTP requirements to account for previously released property in demonstrating compliance with the radiological release criteria.

7. Requires the NRC to hold a public meeting to inform the public of the partial site release request and receive public comments before acting on the request.

8. Incorporates into the recordkeeping important to decommissioning the records of property subject to the release criteria.

9. Adds supporting definitions of key terms.

The partial site release rule makes the following changes to 10 CFR Part 20:

1. Includes releasing part of a facility or site within the scope of the radiological criteria for license termination.

2. Includes releasing part of a facility or site for unrestricted use within the scope of the criteria by which the NRC may require additional cleanup on receiving new information following the release.

The partial site release rule makes the following change to 10 CFR Part 2:

1. Provides for informal hearings in accordance with Subpart L for amendments associated with partial site releases.

### Comments on the Proposed Rule

This analysis presents a summary of the comments received on the proposed rule, the NRC's response to the comments, and changes made to the final rule as a result of these comments.

The NRC received 11 comment letters. Three were from States (Connecticut, Illinois, and Washington), seven from the industry including six power reactor licensees and the Nuclear

Energy Institute (NEI), and one from the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Workgroup.

The Commission sought input from stakeholders on seven specific issues associated with partial site release. The stakeholder input and NRC responses to these issues are included below.

1. Support for the Proposed Rule

Comment: None of the commenters were opposed to the idea of a process for releasing part of a site or facility. Six of the 11 commenters provided specific comments in general support of the concept of the proposed rule. NEI, representing the industry, stated that recent industry experience with decommissioning power reactors indicates that this rule will provide real value to the reactor licensee and the host community. In addition, operating reactor facilities and their host communities will have the option to effectively use property, which does not directly support plant operations. Industry supports this needed regulatory action.

Response: The NRC is not making any changes to the final rule that the NRC believes would negate the general support for this rulemaking.

2. Partial releases following NRC approval of the LTP

Comment: One reactor licensee and NEI disagreed with the statement in the proposed rule that, once an LTP has been approved, there is no longer any need for a separate regulatory mechanism for partial releases. They noted that a significant length of time may pass between approval of the LTP and license termination, and that licensees should retain the opportunity to pursue a partial site release, even after the LTP has been approved, without having to revise the LTP by amendment with its potential for a hearing process.

Response: The purpose of the statement in the proposed rule that there is no longer any need for a separate regulatory mechanism for partial site releases once the LTP is approved was

to clarify the difference between the partial site release process and the LTP change process. This rule only applies to partial site releases that take place prior to approval of a licensee's LTP. Once the LTP has been approved, partial site releases (as subsequent revisions to the LTP), would require NRC approval via license amendment unless the LTP itself contained a sufficient change process or described staged releases of the property prior to license termination. In light of the above information, no changes to the final rule have been made in response to this comment.

3. Site Boundary Definition

Comment: Two reactor licensees and NEI commented that the definition of *Site Boundary* in 10 CFR 20.1003 must be changed and clarifications added to the Statements of Consideration on the uses of "site" and "site boundary." The definition of site boundary in § 20.1003 is "that line beyond which the land or property is not owned, leased, or otherwise controlled by the licensee." In general, the commenters stated that licensees may own, lease or control property, including property contiguous with their existing site, which is not associated with licensed activities and which should not be subject to the radiological release criteria of Part 20. NEI commented that, in practical terms, the LTR should apply to all properties directly associated with the use of licensed materials.

Additionally, one reactor licensee commented that, in such cases where the licensee owns, leases or controls property that is contiguous to the facility but is not for the purpose of receiving, possessing, or using licensed materials, the rule should permit the licensee to make changes to the site boundary pursuant to 10 CFR 50.59 and, when such property is acquired, it should not be required to be incorporated into the site boundary.

Response: The Commission disagrees with the commenter's suggestion that the definition of "site boundary" in 10 CFR 20.1003 must be changed, but agrees that clarification of this issue

is needed. "Site boundary," as defined in 10 CFR 20.1003 is not the area to be considered in demonstrating compliance with the radiological release criteria for all licensees. As one commenter accurately pointed out, the definition of site boundary was incorporated into 10 CFR 20 to support the concept of a controlled area. The terms "site" and "site boundary" are used in a number of contexts by licensees and in the Commission's regulations. In the context of 10 CFR Part 50, the term site boundary is typically applied 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 for the purpose of defining the point at which effluents must meet the dose and concentration limits of Part 20.

Because the radiological release criteria provided in 10 CFR 20, Subpart E, does not utilize the term "site boundary", the NRC does not believe the "site boundary" definition in § 20.1003 requires amending in order to describe the site area which must be considered in demonstrating compliance with the release criteria. Rather, it is clarified that the relevant site area to be considered in demonstrating compliance with 10 CFR 20, Subpart E, is the current and historic licensed site, meaning the site area as described in the original NRC license application, plus any acquisition of property outside the originally licensed site boundary added for the purpose of receiving, possessing, or using licensed material at any time during the term of the license.

The above clarification will apply to the majority of release situations, including those at multi-unit sites. One commenter pointed out, however, that the clarification may complicate terminating the license in the case in which a part of the originally licensed site became part of the licensed site for another licensee at some time in the past, and the originally licensed site is no longer clearly delineated. The partial site release rule is not amended to address unique license

termination issues such as this. A determination of what property must be considered in demonstrating compliance with the release criteria in such circumstances will necessarily be addressed on a case-by-case basis.

Sales or other dispositions of property from within the licensed site area by a power reactor licensee prior to NRC approval of the LTP requires NRC preapproval in accordance with the partial site release rule. Acquisitions, as well as subsequent dispositions, of property located outside of the licensed site area can be made pursuant to 10 CFR 50.59 and NRC pre-approval of these transactions is not required as long as a licensing action is not otherwise required as a result of any regulations impacted as a result of the acquisition or disposition. Depending on the specific site circumstances, acquired property may become part of the several site boundaries established by licensees such as the exclusion area, emergency planning zone, effluent release compliance boundary, restricted area, controlled area, etc, and are therefore subject to applicable regulatory requirements.

In clarifying the area subject to the radiological release criteria, the recordkeeping requirements in 10 CFR 50.75(g) have been revised to require that licensees maintain records of the current and historic licensed site area as well as records associated with partial releases from the licensed site made prior to license termination. By maintaining these records, potential dose contributions from residual radioactivity in the entire area, including any areas previously released, can be assessed in demonstrating compliance with the radiological release criteria when performing a partial site release and when terminating the license. In order to prevent confusion with the site boundary definition in § 20.1003, the term "site boundary" has been changed to "licensed site" in the recordkeeping requirements added to 10 CFR 50.75(g) in the final rule.

4. Dose contribution of residual material to the Environmental Protection Agency's (EPA) environmental radiation standard

Comment: One reactor licensee and NEI commented that the language in the section-by-section analysis of the proposed rule clarifying the relationship between radiation exposure limits associated with 10 CFR 20 Subpart D, Subpart E, and the EPA's limits specified in 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operations," establishes a new policy position as written and constitutes a backfit if incorporated into the final rule. The commenters believe that the exposures due to residual radioactivity associated with a terminated 10 CFR Part 50 license are outside the scope of EPA 40 CFR 190, and that it is not necessary to reduce the 10 CFR Part 20, Subpart E, standard to account for additional exposures that originate from the operation of nearby uranium fuel cycle facilities. The commenters stated that if this interpretation were to hold it would have significant impact not only to licensees considering partial site release but also to licensees currently proceeding to terminate their Part 50 licenses with an onsite ISFSI.

Additionally, a commenter stated that the existence of other sources of exposure to the critical group is already accounted for in the construction of the 0.25 mSv/yr (25 mrem/yr) radiological release criteria for unrestricted use in 10 CFR 20, Subpart E. The commenter also stated that, once a portion of the site is released, it no longer meets the definition of "uranium fuel cycle operation," and therefore takes exception to the statements in the proposed rule that the dose caused by residual material associated with a partial site release is to be considered in combination with the other public doses from fuel cycle facilities.

Response: The NRC disagrees with the commenters' assertion that the section-by-section discussion clarifying the relationship between 10 CFR Part 20, Subparts D and E, and EPA's requirements in 40 CFR Part 190 constitutes a new policy position and, therefore, requires a backfit analysis. As discussed in the Background section of these Statements of Consideration the purpose of the LTR was to ensure that the residual radioactivity for the licensed activity is



within the criteria of the LTR. To avoid licensees taking a piecemeal approach to license termination, the LTR must consider the entire site as defined in the original license, along with subsequent modifications to the license, to ensure that the entire area meets the radiological release requirements of 10 CFR Part 20, Subpart E, at the time the license is terminated. This partial site release rule is consistent with the intent of the LTR and establishes no new policies or standards. The dose contributions associated with previously released areas meet the radiological release requirements of 10 CFR Part 20, Subpart E, at the time the license is terminated. Draft NUREG-1757, Volume II, "Consolidated NMSS Decommissioning Guidance: Characterization, Survey, and Determination of Radiological Criteria," when finalized, will provide guidance to licensees on how to identify and account for these potential dose contributors. The discussion in the section-by-section analysis represents the NRC's views on the application of existing requirements in 10 CFR Part 20 to the new circumstance of partial site releases. However, power reactor licensees should appreciate that they are subject to 40 CFR Part 190 requirements and that site boundaries may need to be reconsidered as a result of a partial site release for purposes of compliance with 40 CFR Part 190. In addition, NRC is reminding licensees that for the purposes of 40 CFR Part 190, they must consider all doses from the operating uranium fuel cycle and that doses from portions of sites released may have come from radioactive material released at the time from an operating uranium fuel cycle facility. This partial site release rule does not amend or reinterpret 40 CFR Part 190 or 10 CFR 20.1301(d) which requires certain licensees, including power reactor licensees, to comply with 40 CFR Part 190. The staff is developing guidance to implement 10 CFR 20.1301(d) for partial site releases, which will be incorporated into NUREG-1757, Volume II. Except for the information collection requirements in 10 CFR 50.75(g), which are not backfits, the requirements in this final rulemaking are voluntary and do not impose a backfit as defined in 10 CFR 50.109(a). Therefore, the NRC finds that the proposed rule

discussion of the relationship between 10 CFR Part 20, Subparts D and E, and EPA's requirements in 40 CFR Part 190 does not constitute a backfit, and that a backfit analysis is not required.

Additionally, the NRC believes that its interpretation of the applicability of EPA's regulations in 40 CFR Part 190 is correct and consistent with past NRC regulatory concepts. Neither commenter demonstrated that the NRC's discussion was inconsistent with NRC regulatory concepts as articulated in the past, or inconsistent with past NRC practice with respect to license terminations in general. A review of the Statements of Consideration for the final 40 CFR Part 190 rule did not disclose any discussion that supports the commenters' contention (see 42 FR 2850, January 13, 1977). On the contrary, the NRC believes that its discussion is entirely consistent with the underlying objective of the EPA requirements in 40 CFR Part 190, *viz.*, that the dose to the relevant receptor be based upon the contribution of all radioactive materials/sources attributable to the nuclear fuel cycle operations, regardless of the licensing status of the radioactive materials or the land on which they are located.

The NRC also disagrees that a partially released area no longer meets the definition for "uranium fuel cycle operation," and therefore the dose contribution attributable to residual material on the partially released site is not required to be considered in determining compliance with the standards of 40 CFR Part 190. It is true that, once a portion of the site is released, it is longer an active part of a uranium fuel cycle operation. However, as noted above, it is residual material resulting from previous operation of the facility, introduced into the general environment as a result of the licensee's action to release the property for unrestricted use, that contributes to the public exposures within the scope of EPA 40 CFR Part 190. With respect to the definition of "uranium fuel cycle," the Commission notes that neither the LTR, nor this rulemaking, redefine or limit the definition of uranium fuel cycle. Residual radioactivity does not lose its original pedigree by NRC's

action to terminate a licence. The dose from this residual material must be considered in combination with other uranium fuel cycle exposures under 40 CFR Part 190. The commenters' position would be true only if the EPA regulation had a temporal component, i.e., it was intended to cover only current and/or future operations at the site. The regulation contains no temporal limitation and simply states that the dose equivalent must consider exposures "from uranium fuel cycle operations." Moreover, the definition of "uranium fuel cycle" in 40 CFR 190.02 covers activities which are sequential in time (i.e., for any given site they may not occur simultaneously). Nonetheless, pursuant to Section 190.10(a) their contribution must be considered in determining compliance with the 40 CFR Part 190 dose standards when releasing radiologically impacted property for unrestricted use. Assuming that the criterion is intended to integrate the instantaneous dose attributable to radioactive materials whose genesis is directly attributable to uranium fuel cycle operations, it is irrelevant that the radioactive materials happen to be located on a site that is no longer used for uranium fuel cycle operations. For these reasons, the NRC continues to believe that its discussion of the applicability of 40 CFR Part 190 in the section-by-section analysis is correct.

Comment: Section 50.83(a)(1)(i) requires that licensees seeking NRC approval of a partial site release evaluate the effect of releasing the property to ensure that the dose to individual members of the public from the portion of the facility or site remaining under the license does not exceed the limits of 10 CFR Part 20, Subpart D. One reactor licensee and NEI commented that the term "portion of the facility or site remaining under the license" be changed to "portion of the facility or site that has not been released for unrestricted use."

Response: As described above, when evaluating compliance with the public dose limits and standards, the dose from a proposed partial site release must be combined with the dose from other fuel cycle sources, which would include the portion of a site or facility remaining under the

license as well as residual material from previously released impacted property. The proposed rule, however, inappropriately limited the dose to be considered to that associated with the portion of the site remaining under the license. Section 50.83(a)(1)(i) has therefore been changed in the final rule to require licensees to evaluate the effect of releasing the property to ensure all applicable doses are considered with regard to the limits and standards of 10 CFR Part 20, Subpart D. Such an evaluation would include consideration of all applicable exposure sources, including relevant fuel cycle sources pursuant to compliance with the EPA's environmental radiation standards incorporated at 10 CFR 20.1301(d). Consequently, rather than adopting the commenter's suggested language, the Commission has adopted broader, more accurate language in the final rule.

5. Use of distinguishability from background as a release criteria for impacted areas

Comment: The partial site release rulemaking, as originally envisioned, proposed that radiologically impacted but remediated areas could be released using the same approval process as a non-impacted area if it could be demonstrated that the radioactivity is not distinguishable from the background radioactivity. Prior to publishing the proposed rule, however, the NRC staff concluded that a technical basis for such a criteria has not been established, and the criteria was not incorporated.

One reactor licensee stated that the rulemaking should preserve, as an alternative, the ability to release an impacted area if it can be demonstrated that there is no residual radioactivity distinguishable from the background present. The release process should then follow the same process as that for a non-impacted area; that is approval via letter as opposed to a license amendment. Additionally, the commenter stated that the burden in this alternative is to develop and present strong reference background radiation data to support and defend the validity of its

use, that the appropriate criteria for indistinguishability from background does exist, and that potential criteria corresponding to the current free release criteria could be used by licensees.

Additionally, a State commenter suggested that the rule incorporate the MARSSIM approach wherein a comparison of statistical distributions (survey vs. background) is used to determine whether radiation levels in the area surveyed are indistinguishable from background.

Response: A distinguishability-from-background release criteria cannot be incorporated into the regulations even as an alternative. In order to demonstrate that a given level of radiation is distinguishable from background, the statistical process for determining the radiation dose or concentration would require the specification of exactly "how hard to look" in order to "see" a difference from the background dose or concentration. Specifying how hard to look would, in effect, be the same as specifying an allowable difference from background that is not statistically important to detect. This would amount to specifying an allowable increment above background. As stated in the proposed rule, no such increment has been endorsed and the criteria cannot be incorporated into the Commission's regulations.

Comment: A State commenter expressed disagreement with the NRC's reasoning for deletion of distinguishability-from-background as a release criteria because, for an unrestricted release, the ALARA requirements of 10 CFR 20.1402 may dictate clean up to levels indistinguishable from natural background.

The commenter also stated that, although it is recognized that proper definition of background is problematic because it is not a single value but rather a statistical distribution of values that varies widely with geographic location and other factors, it is a statistical entity [mean +/- (sd x n)] that can be empirically determined on a case-by-case basis. As a result, the "minimum value above mean background against which to compare survey results," which the

NRC has stated is a value which is not endorsed, can be established by setting a reasonable value for "n" in the foregoing expression.

Response: The Commission disagrees with this comment. There is no connection between ALARA requirements associated with the cleanup of an impacted area and the Commission's decision to delete distinguishability-from-background as a release criteria. The ALARA requirements dictate clean up to levels which are as low as reasonably achievable. There are no requirements to cleanup an area to "levels indistinguishable from natural background."

Although measurement of background radioactivity is related to the statistical entity referred to by the commenter, the process of setting a reasonable value for "n" would present the same issue as choosing an increment above background for use in establishing a distinguishability criteria. Such a "reasonable value" would have to be established and has no current endorsement as a release criteria.

#### 6. Recordkeeping

Comment: NEI recommended that the rule be clarified to acknowledge that reactor licensees may maintain the records associated with acquisition and disposition of property along with the other records required under 10 CFR 50.75(g) in a distributed fashion. Records would not necessarily reside in a specific file folder, but would be maintained within the overall record management system.

Response: The NRC recognizes that licensees may maintain these records in a distributed fashion within the overall record management system. As stated in 10 CFR 50.75(g), if records of relevant information are kept for other purposes, references to these records and their location may be used.

Comment: One reactor licensee commented that, for property added over time, it would make sense to place the current site boundary in the decommissioning records at the time of rule

implementation, rather than research and separately locate each record of acquisition in the past. Since the goal is to ensure the site boundary is known, and that any dispositions or release of property are known, there is no real benefit in locating and placing records of past individual acquisitions into the decommissioning records.

The commenter also stated that records of licensed activities on property acquired since original licensing should not need to be maintained as separate decommissioning records if the acquired property is assimilated into the licensed site. Acquired property should be treated no differently than originally owned property from a decommissioning record perspective. The existing requirements for decommissioning records should apply to the site equally, regardless of whether the portion of the site was purchased after original licensing or before.

In addition, the commenter stated that the cost portion of the regulatory analysis should also include the costs of researching site history and property additions, and use of the portion of the property that was added, if the requirement for this data to be maintained as separate decommissioning records is retained.

Response: It is not the intent of the recordkeeping requirements added at 10 CFR 50.75(g) to require licensees to research and separately locate each record of acquisition made in the past. The recordkeeping in the proposed rule listed the records of the originally licensed site and those of subsequent acquisitions separately in order to clarify that the entire licensed site area (past and present) is subject to the release criteria and must be accounted for in the recordkeeping.

However, because recordkeeping associated with the current licensed site area may not account for releases of property from the licensed site made prior to the partial site release rulemaking, and may not account for all relevant additions to the licensed site, licensees are cautioned that simply placing the information associated with the current licensed site into the

decommissioning records may result in a record inventory which, in aggregate, does not meet the intent of the recordkeeping for records which must be assessed at the time of partial site releases and at the time of license termination.

The listing of records of the originally licensed site and those of subsequent acquisitions added to the recordkeeping requirements at 10 CFR 50.75(g) have been combined in the final rule to avoid the implication that these records must be researched and maintained separately. The cost portion of the regulatory analysis associated with the rule did not assume the maintenance of separate records and, therefore, does not require a revision as a result of this clarification.

Comment: One reactor licensee commented that because establishing the records added to 10 CFR 50.75(g) may be time consuming, depending on the site's history, the final rule needs to allow implementation time.

Response: Although, as stated by NEI, licensees are already maintaining these property records in order to be able to comply with the LTR at the time of license termination, the NRC agrees that some period for implementation may be needed by some licensees. Therefore, the implementation date for the changes made to the recordkeeping requirements at 10 CFR 50.75(g)(4) has been modified to provide a 6-month implementation period.

#### 7. Lack of Clearance Standards

Comment: One reactor licensee commented that, for either partial site release without a license termination plan or license termination for the entire site under existing rules, residual radioactivity may remain as long as the exposure criterion of 10 CFR 20, Subpart E, is satisfied. However, prior to license termination, this same residual radioactivity is treated as licensed material - regardless of how little the amount, concentration, or dose significance - and can only be disposed of by transport to a licensed radwaste disposal facility. The commenter stated that this double standard poses an incentive to retain radioactive material onsite to be later abandoned



in order to avoid potentially excessive costs for radwaste disposal, while creating a longer term risk for additional site cleanup required by other regulatory authority or court of law. The commenter further noted that the NRC is seeking to resolve this discrepancy through a study by the National Academy of Sciences and further agency deliberation, a process that may take several years. Prolonged delay contributes to the erosion in public understanding and confidence in government policy as well as the lack of finality for licensees. Public policy is needed to define the quantitative dose and radionuclide characteristics that have no discernible public health consequences.

The commenter stated that the NRC should recognize that post-license termination requirements imposed by other federal, state or local agencies can prevent the actual release of a site for unrestricted use - in contravention to the purposes of the LTR. NRC should, therefore, act to assert its authority in matters of radiation protection and management of radioactive materials. This will require definitive clearance standards that establish allowable quantities and concentrations of radionuclides for materials. Such standards, which are fully protective of public health and safety and are in the public interest, can be created.

Response: Although the comments are not directly related to the partial site release rulemaking, the NRC is appreciative of the issues raised. The Commission is currently re-examining its approach for control of solid materials, including whether it is appropriate to set a standard in this area that would apply to all licensees. The points raised in the comments will be considered as part of the Commission's review of alternative approaches.

#### 8. Finality of Releases

Comment: A reactor licensee commented that, once the Commission has released the property, its jurisdiction should end. The commenter recommended that, in order to incorporate the doctrine of finality, 10 CFR 20.1401(c) should be changed to state that after a site has been

decommissioned and the license terminated, or after part of a facility or site has been released for unrestricted use, the Commission will not require additional cleanup.

Response: The Commission disagrees with this comment. The NRC believes that the desired finality of a release is not adversely impacted by the provisions in 10 CFR 20.1401(c). Eliminating the provisions for additional cleanup where a significant public risk may exist could have a negative impact on public health and safety and would degrade public confidence in the license termination process. One reactor licensee concurred with the provisions in 20.1401(c) by stating that this criteria is an important addition providing for adequate protection of the public if the need for additional cleanup has been identified, but at the same time offering a standard that must be met to ensure that only clear and substantiated conditions exist that would warrant such actions.

It should be noted that there is a low probability that additional cleanup would be required. The Statements of Consideration for the license termination rule [61 FR 39301; July 29, 1996, as amended at 62 FR 39091; July 21, 1997] points out that, under the provisions of the rule, a licensee is allowed to demonstrate compliance with the dose criteria through use of several screening and modeling approaches. Each approach has a degree of conservatism associated with the relationship of the measurable level of a contaminant in the environment to the dose criterion. Because of the surveys performed by the licensee and confirmatory surveys routinely performed by NRC, the chances of discovering previously unidentified contamination exceeding the dose criteria would be very small.

#### 9. State Regulatory Agency Participation

Comment: A State commenter noted that the proposed rule is silent with regard to participation by state regulatory agencies. While there are general provisions for stakeholder input and public participation, notification, meetings and hearings, there is no explicit provision for

"hands-on" involvement by state regulators. The commenter suggested the rule be amended to include explicit provisions for State participation. The commenter also stated that, in their experience, the role of the state in federally regulated site clearance processes has historically been that of "independent verification." This role assures that the site release process is in compliance with applicable state regulations and lends additional credibility to a process that is inherently predisposed to intense public scrutiny. Participation by the state is also important in the event that portions of the property to be released would be transferred to state ownership and/or control. For these reasons, amending the rule to provide for independent verification by state regulators makes good sense.

Response: The Commission has published the policy statement "Cooperation With States at Commercial Nuclear Production or Utilization Facilities" [54 FR 7530; February 22, 1989, as amended at 57 FR 6462; February 25, 1992] which the NRC believes provides an adequate mechanism for State regulatory agencies to participate in the release process. The policy statement is intended to provide a uniform basis for NRC/State cooperation as it relates to the regulatory oversight of commercial nuclear power plants and other nuclear production or utilization facilities. The policy statement allows State officials of host and adjacent states to accompany NRC on inspections and, under certain circumstances, enables States to enter into instruments of cooperation which could allow States to directly participate in NRC inspection activities at operating facilities as well as at those undergoing decommissioning.

The interest of the States with regard to the scope of the partial site release rule is expected to be primarily concerned with licensee demonstrations of compliance with the radiological release criteria for unrestricted use. In addition to any direct or independent participation agreed to between the State and NRC, or between the State and the licensee, it is anticipated that the States will continue to participate in the public meetings held prior to NRC

approval of partial site releases, and will continue to coordinate with licensees and NRC in evaluating proposed partial site releases with regard to the release criteria. Therefore, explicit provisions for direct State participation are not being incorporated into the partial site release rulemaking.

10. Radiological Surveys of Non-Impacted Sites

Comment: A State commenter stated that, rather than require the performance of radiological surveys for non-impacted areas, the rule defers to the guidance contained in MARSSIM for demonstrating that a proposed release area is non-impacted. The MARSSIM guidance calls for the performance of a historical site assessment (HSA). The HSA is an investigation to collect information describing a site's complete history from the start of site activities to the present time. Information collected will typically include site files, monitoring data, and event investigations, as well as interviews with current or previous employees to collect firsthand information. The assessment results in a classification of areas according to their potential for containing residual radioactivity. Areas that have no reasonable potential for residual radioactivity in excess of natural background or fallout levels are classified as non-impacted areas, and no surveys are required. The commenter feels that relying on a historical site assessment without the benefit of an up-to-date-radiation survey leads to results which are less reliable and more difficult to defend, and is contrary to the rule's stated purposes related to the assurance of meeting the radiological release criteria and of increasing public confidence.

Additionally, the commenter stated that the NRC supports its position that the rule should not require surveys for non-impacted areas by noting that surveying a truly non-impacted area necessarily involves demonstrating that the radioactivity from any residual contamination is indistinguishable from natural background radioactivity. The commenter also states that NRC has further supported this position in the Statements of Consideration by stating that, since it has not

established a minimum value above mean background to compare survey results, surveying such areas is not feasible.

Response: The NRC believes that the rule should not specifically require the performance of radiological surveys for non-impacted areas. The rule does not, however, preclude the collection and use of such surveys by the licensee. The MARSSIM provides adequate guidance acceptable to the NRC for determining when additional surveys are appropriate, and for demonstrating that a proposed release area is non-impacted. The MARSSIM approach in evaluating HSA data for the purposes of classifying an area prescribes that process knowledge of events or conditions which may have led to residual contamination be used in combination with historical analytical information such as survey data. MARSSIM Section 3.6, "Evaluation of Historical Site Assessment Data" states that if process knowledge suggests that no residual contamination should be present and the historical analytical data also suggests that no residual contamination is present, the process knowledge provides an additional level of confidence and supports classifying the area as non-impacted. MARSSIM specifically cautions however, that existing radiation data must be examined carefully because previous survey and sampling efforts may not be compatible with the objectives of the HSA, may not be extensive enough to sufficiently characterize the facility or site, and because conditions may have changed since the site was last sampled.

NRC Regulatory Issue Summary 2002-02, "Lessons Learned Related to Recently Submitted Decommissioning Plans And License Termination Plans," states that old records may be inadequate or inaccurate for the purpose of developing either the HSA or site characterization, and suggests that these records not be relied on as the sole source of information for the HSA or site characterization. Interviews with current and former staff and contractors play an essential role in formulating the HSA, but may be as inadequate or inaccurate as old records. Experience

has shown that old records and results of operational surveys and post-shutdown scoping surveys have been submitted as substitutes for characterization surveys. For example, the results of operational surveys may represent radiological status, describing conditions over a limited time span, or may have been conducted to address specific events (i.e., post-spill cleanup assessment). In a few instances, the results of personnel interviews and information, which can only be considered as anecdotal, have been presented in the HSA. It could not be determined whether this information, in fact, was part of an unbroken chronological history of the site or contained time gaps for which operational milestones or occurrences were missing. Although NRC encourages licensees to review old records and conduct personnel interviews (past and current employees and key contractors), there is a need to present this information in its proper context and qualify its usefulness and how it might be supplemented by additional data searches or characterization surveys.

Sections 10 CFR 50.83(c)(2) and 10 CFR 50.83(d)(2) of the proposed rule stated that, after receiving an approval request or license amendment application from the licensee, the NRC will determine whether the licensee's historical site assessment is adequate. To avoid the implication that the classification of release areas as non-impacted is based solely on historical process knowledge of events or conditions, these sections have been modified in the final rule to state that the NRC will determine whether the licensee's classification of any release areas as non-impacted is adequately justified. Such a determination would require a review of the licensee's use of both analytical data as well as process knowledge of events and conditions in accordance with the MARSSIM guidance.

The NRC maintains its position that the rule should not require surveys of non-impacted areas, however licensees may, at their own initiative, choose to survey these areas. The question of whether surveys of non-impacted areas should be performed is solely concerned with the

adequacy of HSAs and the site characterization process in concluding that there is no reasonable potential for residual radioactivity.

11. Final Radiation Survey and Associated Documentation

Comment: Section 50.82(a)(11)(ii) provides the criteria for license termination with regard to the terminal or final radiation survey and its documentation. One reactor licensee and NEI commented that adding the phrase "including any parts released for use before approval of the license termination plan" as suggested in the proposed rule implies that final surveys at license termination apply to previously released property and might force a licensee to perform remediation or conduct surveys on land which has been previously released for use when not otherwise required. One of the commenters also stated that the phrase "released for use" should be changed to "released for unrestricted use." Additionally, a commenter stated that the phrase "are suitable for release" with regard to the property being released should more appropriately be changed to indicate that the release meets the applicable release criteria.

Response: As stated in the proposed rule, the NRC does not anticipate further surveys of a previously released area, but rather is seeking to account for, in the radiation survey and associated documentation demonstrating compliance with the release criteria, potential dose contributions associated with previously released areas. The language at 10 CFR 50.82(a)(11)(ii) in the final rule has therefore been modified to indicate that the final radiation survey and associated documentation is to include an assessment of dose contributions associated with any parts previously released for use in demonstrating that the facility and site meet the radiological release criteria. The term "released for use" is retained because the intent is that the documentation assess dose contributions from previously released parts of the facility or site whether they were released for restricted or unrestricted use. Additionally, the phrase "are suitable for release" is changed to "have met the applicable criteria."

12. Question from the "Issues for Public Comment" section of the Proposed Rule: Are there rulemaking alternatives to this proposed rule that were not considered in the regulatory analysis for this proposed rule?

Comment: NEI and one reactor licensee commented that some licensees have expressed a desire to have the option to use the license amendment approach even for non-impacted lands to provide additional assurance to future owners, and that this option should be included in the proposed rule.

Response: The Commission disagrees with this comment. There is no need to provide this option because the staff has determined that this approval is not an amendment to a license pursuant to the analysis in *Cleveland Electric Illuminating, et al.* (Perry Nuclear Power Plant, Unit 1), CLI-96-13, 44 NRC 315, 328 (1996). The NRC's oversight role in these cases is essentially a confirmation to ensure that the licensee complies with the clearly defined criteria found in the rule. This is in contrast to an impacted area where the staff must analyze and evaluate the information and survey documentation provided by the licensee in order to determine if release of the impacted area poses a threat to public health and safety. For these cases, the license amendment process is appropriate. Allowing a licensee to seek a license amendment for release of non-impacted areas would also decrease the efficiency and effectiveness of the staff's review process. The staff believes that a letter approval of a release will be sufficient to provide future property owners with assurance that the land poses no risk to public health and safety. Moreover, the rule established a process for the NRC to obtain public comments before making a decision to approve a release.

13. Question from the "Issues for Public Comment" section of the Proposed Rule: Are the proposed definitions in § 50.2 clear?



Comment: The MARSSIM Workgroup commented that the definitions of impacted and non-impacted areas proposed for incorporation into 10 CFR 50.2 are inconsistent with MARSSIM. The workgroup recommends that the definitions be taken verbatim from the MARSSIM glossary as follows:

“Impacted Area - Any area that is not classified as non-impacted. Areas with a possibility of containing residual radioactivity in excess of natural background or fallout levels.”

“Non-Impacted Area - Areas where there is no reasonable possibility (extremely low probability) of residual contamination. Non-impacted areas are typically located off-site and may be used as background reference areas.”

Response: The definitions of impacted and non-impacted areas being added to 10 CFR 50.2 will remain as presented in the proposed rule. These definitions were not taken from the MARSSIM glossary but were, for the most part, taken from the definitions provided in Section 2.2 of the MARSSIM text, titled “Understanding Key MARSSIM Technology.” The text in Section 2.2 states that areas that have no reasonable potential for residual contamination are classified as non-impacted areas, and that areas with some potential for residual contamination are classified as impacted areas.

In the definitions of impacted and non-impacted areas incorporated into the rule, the term “residual contamination” found in the MARSSIM text was replaced with the term “residual radioactivity” for consistency with the definition of residual radioactivity found in 10 CFR 20.1003. For clarity, the definitions also specify that the radioactivity referred to is that which is in excess of natural background or fallout levels.

In addition, the word “reasonable” was added to the definition of impacted areas in order for the definitions of impacted and non-impacted areas to be mutually exclusive. Without the opposition between the two definitions, an area could conceivably meet both definitions. The

MARSSIM glossary definition of impacted area states that it is an area not classified as non-impacted, and therefore this change is consistent with the MARSSIM intent that the definitions be mutually exclusive. Also, non-impacted areas are defined in the MARSSIM glossary as those areas with no reasonable possibility of residual contamination, while impacted areas are defined as those areas with a possibility for residual radioactivity - meaning no matter how slight a possibility, since the word reasonable is omitted. Because the word "reasonable" is omitted from the MARSSIM glossary definition of impacted areas, the two glossary definitions are not mutually exclusive as intended.

Finally, the statement in the MARSSIM glossary definition that non-impacted areas are typically located off-site and may be used as background reference areas is irrelevant to the determination of whether an area is non-impacted and is therefore inappropriate for incorporation into the definition.

Comment: One reactor licensee and NEI recommended that the definitions for Historical Site Assessment, Impacted areas, and Non-impacted areas be incorporated into 10 CFR 50.2 and be changed to specify that the residual material or radioactivity is that from licensed activities.

Response: The radioactivity referred to in the definition of Historical Site Assessment cannot be limited to that resulting from licensed activities and the definition is not revised. Residual radioactivity is a defined term in 10 CFR 20.1003 referring to radioactivity at a site resulting from any activities under the licensee's control, and includes radioactivity from both licensed and unlicensed sources.

14. Question from the "Issues for Public Comment" section of the Proposed Rule: Is public involvement adequately considered?

Comment: NEI commented that the rulemaking adequately considers public involvement. A State commenter stated, however, that there is no mechanism described in the proposed rule that addresses how or if stakeholders can challenge the "non-impacted designation" by a licensee. Though the proposed rule states that it provides for public participation through a public meeting, a public meeting to tell stakeholders of NRC decisions is not a participatory process. It gives no right of intervention, no right of appeal, and no right of a meaningful review. How does a public meeting address a material dispute in fact? NRC is not bound to consider any information brought forward during the public meeting. At the very least a mandatory public hearing is needed.

Response: The Commission disagrees with this comment and believes that the public will have ample opportunity to be involved with partial site release issues. The partial site release rulemaking provides for public participation through review and comment on a licensee's proposed release plans and through participation in a public meeting whether or not an amendment is involved. This process enables the public to collect information, to comment on and question the actions at the site with regard to the proposed release, and to discuss relevant issues among stakeholders. The NRC will consider any information or concerns brought forward by members of the public during the public review and comment period or during the public meeting.

The NRC has issued a policy statement, "Policy on Enhancing Public Participation in NRC Meetings" [67 FR 36920, May 28, 2002]. This policy statement provides a revised policy that the NRC will follow in opening meetings to public observation and participation. It defines three categories of public meeting, each with an increasing level of public participation. The public meeting required by the partial site release rule will be classified as a Category 3 meeting with the highest level of public participation. In these meetings, public participation is actively sought. The meetings are specifically tailored for the public to discuss relevant issues with the NRC and other

stakeholders, to make comments, and ask questions throughout the meeting. Questions or concerns that cannot be resolved at the meeting will be assigned to a designated NRC staff person for action.

Although there is no mandatory public hearing provided for in this rule, there are ways in which the public may participate in hearings on partial site release issues. First, in the event that a license amendment associated with a partial site release is challenged, there will be the opportunity for a hearing on the license amendment. And second, NRC regulations in 10 CFR 2.206, "Requests for Action under this Subpart," allow any member of the public to raise potential health and safety concerns and petition the NRC to take specific actions to resolve a dispute identified in the petition. The NRC believes that a mandatory hearing is not warranted in light of the many opportunities for public participation, and consequently, no change has been made to the final rule in response to this comment.

15. Question from the "Issues for Public Comment" section of the Proposed Rule: Should the license amendment process be required for all partial site release approvals, regardless of whether the site has been classified as non-impacted?

Comment: NEI commented that requiring the license amendment process for NRC approval of partial site releases of non-impacted lands is not justified. The comment states, however, that some licensees have expressed a desire to have the option to use the license amendment approach even for non-impacted lands, and recommends that this approach be offered as an option.

Response: The NRC agrees that requiring its approval for the release of a non-impacted area should not require a license amendment where an amendment is not otherwise required as a result of any regulations impacted as a result of the change.

16. Question from the "Issues for Public Comment" section of the Proposed Rule: Does the proposed rule make it adequately clear that when performing partial site releases and when releasing the entire site at license termination, licensees must consider potential dose contributions from previous partial releases in demonstrating compliance with the radiological release criteria?

Comment: NEI stated that the rule makes this issue adequately clear and also stated that the guidance promised in the proposed rule for assessing potential dose contributions will help identify how consideration of potential dose contributions can best be accomplished. The comment further stated that the guidance is needed before the final rule is issued to ensure that the partial site release process and the ultimate license termination can be accomplished practically as envisioned.

Response: The NRC agrees that the rule makes this issue adequately clear. The NRC recognizes that licensees seeking partial site releases will require guidance as to how to account for dose contributions from previous releases. In order to provide this guidance, on September 26, 2002, the NRC published a notice of availability of draft NUREG-1757, Volume II, "Consolidated NMSS Decommissioning Guidance: Characterization, Survey, and Determination of Radiological Criteria," in the Federal Register for public comment and expects to publish it as a final document upon resolution of the public comments.

Comment: A State commenter questioned how the partial site release rulemaking addresses issues where, following release, contamination is found in an area classified and released as non-impacted, or where contamination is found to be in excess of the criteria established in the LTP, or, in the above conditions, where the property was transferred to another entity. Additionally, the commenter questioned what rights a potential purchaser would have against the licensee if contamination is found following the release.

Response: Although the partial release removes the property from the license and activities conducted on the property are no longer under the jurisdiction of the NRC, the rule amends 10 CFR 20.1401(c) to bring partial site releases within the scope of the criteria by which the Commission may require additional cleanup on the basis of new information received following the release. As stated in 10 CFR 20.1401(c), additional cleanup would only be required if the new information reveals that the radiological release requirements of 10 CFR 20, Subpart E, were not met and there continues to be a significant threat to public health and safety from residual radioactivity. The rule does not address any other matters of a commercial nature which may be associated with released property, including issues related to contamination found on released property, the magnitude of which falls short of the additional cleanup criteria in 10 CFR 20.1401(c).

17. Question from the "Issues for Public Comment" section of the Proposed Rule: Is there reason to limit the size or number of partial site releases?

Comment: NEI and a reactor licensee stated that there is no reason to limit the size or number of partial site releases. They stated that, as long as the final license termination addresses the entire site, the intent of the license termination rule is met.

Response: The NRC agrees that there is no reason to limit the size or number of partial site releases. Partial releases performed prior to license termination require, in each case, a demonstration of compliance with the radiological release criteria of 10 CFR Part 20, Subpart E, as well as a demonstration of compliance with other regulatory requirements which may be impacted as a result of changing site boundaries. Additionally, the dose contributions from residual radioactivity in previously released impacted areas are considered with respect to the release criteria when performing subsequent partial releases and when releasing the entire site at license termination.

18. Question from the "Issues for Public Comment" section of the Proposed Rule: Are there other potential impacts on continued operation or decommissioning activities as a result of partial site releases that should specifically be considered in the rule?

Comment: A State commenter stated that the impact of future operation or use of the area released under a partial site release must be considered with regard to potential threats to the storage of spent nuclear fuel or operation of the nuclear power plant prior to allowing control of the released area to be transferred to a non-licensee. The commenter referred to a situation in which a licensee proposes a partial site release with the intent to sell the released property for development of a gas fired electrical generating plant in close proximity to spent fuel stored on the remainder of the site. If no safety analysis is performed in advance of the release, future threats to the nuclear fuel will not be addressed. The commenter states that placing requirements on an existing licensee only after threats are identified as a result of future activities on a released area is not an acceptable mechanism of protecting public health and safety.

Response: The NRC believes that consideration of the potential hazards associated with the future or end use of property proposed for partial site release should not be incorporated into the partial site release rulemaking. Future use of property as an approval criteria based on expectations existing at the time of the release request holds little practical value since the actual future use of property released for unrestricted use cannot be anticipated and could, in any event, change following the release.

As part of its application for a construction permit and operating license for a power reactor facility, the licensee is required to perform an analysis of the effects the reactor facility will have on the environment, including the effects from nearby industrial facilities and transportation in accordance with the siting criteria of 10 CFR Part 100. The partial site release rulemaking

specifically requires licensees requesting a partial site release to evaluate their continued compliance with these siting criteria.

Additionally, the licensee must continue to ensure that its bases and conclusions as presented in the Final Safety Analysis Report, that form part of the basis for its operating license, remain valid in accordance with 10 CFR 50.71. Therefore, the licensee must ensure that the licensed facility is adequately protected and that operations can be conducted with an acceptable degree of safety with respect to offsite activities as they are identified. The NRC would review any necessary changes to the nuclear plant license, or changes to the plant licensing basis, that evolve from the licensee's evaluation. To the extent that the future use of the property to be released is known, these reviews and evaluations would be performed as part of the licensee's overall assessment of the viability of requesting NRC approval for a partial site release.

The NRC recognizes that a non-licensed third party may elect to locate potentially hazardous facilities, or engage in hazardous activities, on property adjacent to a licensed site, including property released for unrestricted use. Although the NRC has no authority to regulate the activities of non-licensed third parties or to prevent third parties from constructing facilities or engaging in activities which present a potential hazard to the licensee's plant, the NRC does have authority to take action against the licensee. Assuming that the potential hazard is such that the NRC would not have allowed the siting of the plant if the conditions were known, then under Section 186 of the Atomic Energy Act, the NRC could revoke the license to prevent the hazard. Since the license can be revoked, lesser actions can be taken as well - such as issuing an order or suspension, or a demand for information, depending on the circumstances.

19. Rule Language Comments.

Comment: One reactor licensee and NEI commented that the language contained in Section 50.75(g)(4) is not consistent with existing Section 50.75(g) which states "Information the



Commission considers important to decommissioning consist of ... (4) Licensees shall maintain property records containing the following information:...." The term "Licensees shall maintain" should be deleted.

Response: The NRC agrees with the commenters and the final wording in Section 50.75(g) reflects the comment.

Comment: One reactor licensee and NEI commented on the wording in Section 50.75(g)(4)(iv) of the proposed rule, stating that the word "disposition" should be changed to "release and final disposition" the first time it appears, and change "disposition" to "release" the second time it appears."

Response: The NRC agrees with the commenters and the final wording in Section 50.75(g) reflects the comment.

Comment: One reactor licensee and NEI commented on the wording in Section 50.82(a)(9)(ii)(H) of the proposed rule, stating that the term "released for use" should be changed to "released for unrestricted use."

Response: The comment is not incorporated. The intent of the wording in Section 50.82(a)(9)(ii)(H) is that the LTP identify previously released parts of the facility or site whether they were released for restricted or unrestricted use.

Comment: One reactor licensee and NEI commented that Sections 50.83(c) and 50.83(e) should include references to the satisfaction of the public meeting requirements specified in 50.83(f).

Response: The NRC believes that including references to the public meeting requirement in Sections 50.83(c) and 50.83(e) is redundant and unnecessary. The requirement to hold a public meeting described in Section 50.83(f) applies, as stated, to either an approval request for a partial site release or a license amendment application and, therefore applies to the submittals

described in Sections 50.83(c) and 50.83(e).

Comment: One reactor licensee and NEI commented that, for a release of impacted areas under the proposed partial release rule, 10 CFR 50.59 will not apply, since a license amendment would be required. Therefore, the wording in Section 50.83 should be modified to delete the reference to complete a 10 CFR 50.59 evaluation for these release requests.

Response: The NRC agrees with the commenters. Section 50.83(b) has been modified in the final rule to only require a § 50.59 evaluation for the case where a written release request is submitted.

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

This final rule amends NRC's requirements in 10 CFR Part 2, Subpart L, "Informal\_Hearing Procedures for Adjudications in Materials and Operator Licensing Proceedings," 10 CFR Part 20, "Standards for Radiation Protection," and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," as follows:

1. 10 CFR 2.1201.

This final rule amends 10 CFR 2.1201 by adding a new paragraph (a)(4) which permits the use of informal hearing procedures for amendments associated with partial site releases at nuclear power reactors. This change is needed in order to provide an opportunity for a hearing on a license amendment request for a partial site release. The staff believes that informal hearings are appropriate in this situation since the issues would be similar to the materials licensing issues that are currently subject to Subpart L under §2.1201(a)(1). It should be noted that the rule does not provide for license amendments to authorize partial site releases when there is no reasonable

potential for residual radioactivity in the area to be released. Because there are no license amendments in these cases, there are no corresponding opportunities for hearings. However, the NRC will notice receipt of a licensee's proposal for a partial site 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 release approval request or license amendment application, as applicable.

2. 10 CFR 20.1401

Paragraphs 20.1401(a) and (c) have been revised to expand the scope of radiological criteria for license termination to include the release of part of a facility or site for unrestricted use in accordance with § 50.83. In 10 CFR Part 20, the NRC provides standards for protection against radiation. These modifications are necessary because NRC's regulations did not address cases when part of a facility or site is to be released for unrestricted use. The expansion in scope pursuant to §§ 20.1401 is related to the radiation dose limits to individual members of the public and to radiological criteria for license termination which are specified in 10 CFR Part 20, Subparts D and E, respectively.

With respect to 10 CFR Part 20, Subpart D, the requirements specified set the annual dose limit for an individual member of the public at 1.0 mSv/yr (100 mrem/yr). However, there are a number of more stringent dose standards applicable to power reactor licensees that must also be considered. These standards include the EPA environmental radiation standards incorporated in § 20.1301(d), the Subpart D compliance standards in § 20.1302(b), the radiological effluent release objectives to maintain effluents ALARA in Appendix I to 10 CFR Part 50, and any dose standards that may be established by special license conditions.

A licensee performing a partial site release must continue to comply with the public dose limits and standards as they pertain to the area remaining under the license. In addition, the licensee must comply with the public dose limits for effluents entering the released portion of the

site. A licensee must demonstrate that moving its site boundary closer to the operating facility would not result in a dose to a member of the public that exceeds these criteria. If residual radioactivity exists in the area to be released for unrestricted use, the dose caused by the release must be considered along with that from the licensee's facility, as well as, for the case of the EPA's environmental radiation standard (40 CFR Part 190) incorporated in § 20.1301(d), that from any other uranium fuel cycle operation in the area, for example, a facility licensed under 10 CFR Part 72, to determine compliance with the above standards. As a consequence, a partial site release for unrestricted use that contains residual radioactivity may have to meet a standard lower than the radiological criteria of 10 CFR Part 20, Subpart E, because the combined dose from the partial site release and the dose from these other sources must meet the public dose limits and standards described above.

With respect to 10 CFR Part 20, Subpart E, the scope applies to decommissioning reactor facilities. However, as currently written, it does not specifically apply to operating reactors. The reactor remains "operating" until a licensee submits the certifications of permanent cessation of operations specified in § 50.82(a)(1), when its status changes to "decommissioning."

Radiological criteria for license termination at 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 0.25 mSv/yr (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 decontamination activities, such as adverse health impacts 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 radiation" and includes doses from ground water sources of drinking water. The

standard for unrestricted use at 10 CFR Part 20, Subpart E, does not include doses from effluents or direct radiation from continuing operations. However, as noted in the above section on public dose limits, the dose from these sources must be considered when demonstrating compliance with the radiological release criteria.

Section 20.1401(c) limits additional cleanup following the NRC's termination of the license. Additional cleanup would only be required if new information reveals that the requirements of Subpart E were not met and a significant threat to public health and safety remains from residual radioactivity. Similarly, the rule applies to portions of the site released for use within the scope of the criteria by which the Commission may require additional cleanup on the basis of new information received following the release.

The rule is intended to apply Subpart E to power reactor licensees, both operating and decommissioning, that have not received approval of the LTP. Because 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 would be available to licensees for a partial site release before they receive approval of the LTP.

Section 20.1402 specifies the radiological criteria to be used to determine that a site is acceptable for unrestricted use. This final rule does not require an analysis to demonstrate that the area to be released meets the criteria of § 20.1402 for cases when the licensee is able to demonstrate that there is no reasonable potential for residual radioactivity in the area to be released. In these cases, compliance with § 20.1402 is demonstrated by providing documentation of an evaluation of the site to identify areas of potential or known sources of radioactive material. The evaluation must conclude that the area is non-impacted and there is no reasonable potential for residual radioactivity. Acceptable guidance describing the performance of this demonstration is contained in draft NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual

(MARSSIM).”

For areas classified as impacted, the rule requires a license amendment that includes a demonstration of compliance with § 20.1402 for the area that is released for unrestricted use.

This amendment to Part 20, Subpart E, revises §§ 20.1401(a) and (c) and adds the release of part of a facility or site for unrestricted use to the provisions and scope of 10 CFR Part 20, Subpart E.

3. 10 CFR 50.2

Paragraph § 50.2 is amended to add definitions of “Historical Site Assessment,” “Impacted Areas,” and “Non-impacted Areas.” Clear definitions of these terms, which are also defined in draft NUREG-1575, “Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM),” 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, the licensee 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*. The historical site assessment is an investigation to collect information describing a site’s complete history from the start of site activities to the present time. Information collected will typically include site files, monitoring data, and event investigations, as well as interviews with current or previous employees to collect firsthand information.

The MARSSIM approach in evaluating HSA data for the purposes of classifying an area prescribes that process knowledge of events or conditions that may have led to residual contamination be used in combination with analytical information such as survey data. This approach is discussed in the Comments on the Proposed Rule section of this notice. The HSA

assessment process results in classifying areas according to the potential for containing residual radioactivity. Areas that have no reasonable potential for residual radioactivity in excess of natural background or fallout levels are classified as *non-impacted areas*. Areas with some reasonable potential for residual radioactivity in excess of natural background or fallout levels are classified as *impacted areas*. Further discussion regarding the meaning and use of these terms is contained in NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)."

4. 10 CFR 50.75.

This final rulemaking amends § 50.75 to add a new paragraph (g)(4). The recordkeeping requirements in § 50.75(g)(4) are necessary to ensure that potential dose contributions associated with partial site releases can be adequately considered at the time of any subsequent partial releases and at the time of license termination. Records to be retained include the licensed site area (including property acquired or used for the purpose of receiving, possessing, or using licensed materials), licensed activities carried out on the property acquired or used, and information demonstrating licensee compliance with the radiological release criteria at the time of the partial site release.

In § 50.75(c), the NRC defines the amount of financial assurance required for decommissioning power reactors. There is no provision to adjust the amount to account for the costs of a partial site release. While a partial site release may reduce the cost of decommissioning for the remainder of the site, the NRC is not reducing the required amount for the following reasons. Costs incurred for purposes other than reduction of residual radioactivity to permit release of the property and termination of the license are not included in the amount required for decommissioning financial assurance. A partial site release may incur costs that do not fit the definition of decommissioning. Therefore, an evaluation of the costs would be

necessary to determine what adjustment, if any, is appropriate. In addition, the cost of a partial site release is expected to be a small fraction of the cost of decommissioning. Such a small adjustment can be considered within the uncertainty of the amount specified in § 50.75(c) and does not provide a compelling reason to undertake the technical justification of adding a generically applicable adjustment factor to the requirement.

In § 50.75(g), the NRC 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. Information on structures and land that were included as part of the site is also important to decommissioning in order to ensure that the dose effects from partial releases are adequately accounted for when the license is terminated.

Records relevant to decommissioning must be retained until the license is terminated. The rule requires a licensee to identify its licensed facility and site, as defined in the original license application, to include a map, and to record any additions to or deletions from the licensed site after original licensing, along with records of the radiological conditions of any partial site releases. As previously noted, these records will ensure that potential dose contributions associated with partial site releases can be adequately considered at the time of any subsequent partial releases and at the time of license termination. As a result of comments received on the proposed rule, the implementation date for the changes made to the recordkeeping requirements at 10 CFR 50.75(g)(4) has been modified in the final rule to provide a 6-month implementation period.

The purpose of the License Termination Rule (LTR) (61 FR 39301, July 29, 1996, as amended at 62 FR 39091, July 21, 1997) and 10 CFR 50.82 is to ensure that any residual



radioactivity associated with licensed activity is within the radiological release requirements of 10 CFR Part 20, Subpart E, at the time the license is terminated. Although not previously codified, the requirement to maintain records of the entire licensed site as defined in the original license, along with subsequent modifications to the licensed site, clarifies the intent of the LTR and is necessary to ensure that potential dose contributions from the entire area can be adequately considered in demonstrating compliance with the release criteria. The recordkeeping applies to all licensees, including those who modify the licensed site by releasing a part of their site prior to license termination. It is expected that licensees are maintaining property records in order to comply with the LTR at the time of license termination and, therefore, these recordkeeping requirements do not establish new policies, standards, or requirements not already inherent to compliance with the radiological release criteria of the LTR.

5. 10 CFR 50.82.

With respect to Section 50.82(a)(9)(ii) a new Subparagraph (H) is added to include the identification of parts of the site previously released for use with the information listed in the LTP. Section 50.82(a)(9) requires the submittal of an application for license termination that includes an LTP. Section 50.82(a)(11) requires that the NRC make a determination that the final survey and associated documentation provided by a licensee demonstrates that the site is suitable for release at the time the license is terminated. These sections codify the NRC's views that certain information is required to evaluate the adequacy of a licensee's compliance with the radiological criteria for license termination in 10 CFR Part 20, Subpart E, and the license termination criteria are applicable to the entire site. However, because the LTP is not required until 2 years before the anticipated date of license termination, a licensee may perform a partial site release before it submits the necessary information. The information required when the LTP is submitted refers to the "site." It is not clear that a licensee could be required to include the areas released because

they no longer are part of the "site." The NRC is concerned that a licensee could adopt partial site releases as a piecemeal approach to relinquish responsibility for a part of its site without going through the license termination process and without ensuring that the release criteria of 10 CFR Part 20, Subpart E, are met.

With respect to Section 50.82(a)(11)(ii), this final rule clarifies that the final radiation survey shall include an assessment of the dose contribution associated with portions of the site that have been released before approval of the license termination plan. The objective is to ensure that the entire area meets the radiological release requirements of 10 CFR Part 20, Subpart E (0.25 mSv/yr[25 mrem/yr] reduced to ALARA) at the time the license is terminated. This amendment to § 50.82(a)(11)(ii) requires that the final radiation survey and associated documentation include an assessment of dose contributions associated with any parts previously released for use in demonstrating that the facility and site meet the radiological release criteria in accordance with 10 CFR Part 20, Subpart E. Although no further surveys of previously released areas are anticipated, the dose assessment must account for possible dose contributions associated with previous releases in order to ensure that the entire area meets the radiological release requirements of 10 CFR Part 20, Subpart E (0.25 mSv/yr [25 mrem/yr] reduced to ALARA) at the time the license is terminated.

6. 10 CFR 50.83.

This rule adds a new section § 50.83, separate from the current decommissioning and license termination rules, that identifies the criteria and regulatory framework for power reactor licensees that seek to release part of a facility or site for unrestricted use at any time before NRC approval of its LTP. This section is also required because NRC regulations do not address cases in which the NRC may release portions of the site or facility before the approval of the license termination plan.

The rule requires NRC approval for a partial site release. The approval process under which the property will be released depends on the potential for residual radioactivity from plant operations remaining in the area to be released. First, for proposed release areas classified as *non-impacted* and, therefore, having no reasonable potential for residual radioactivity, the licensee will be allowed to submit a letter containing specific information and requesting approval of the release. Because there is no reasonable potential for residual radioactivity in these cases, the NRC will approve the release of the property by letter after determining that the licensee has met the criteria of the rule. Guidance for demonstrating that a proposed release area is *non-impacted* is contained in NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)." The NRC would generally not perform radiological surveys and sampling of a non-impacted area. However, if the NRC determines that surveys and sampling were needed, they would be done as part of NRC's inspection process. Second, for areas classified as impacted and having some reasonable potential for residual radioactivity, the licensee will submit the required information in the form of a license amendment for NRC approval. The proposed amendment will also include the licensee's demonstration of compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402.

Licensees may find it beneficial to review their survey plans and design with the NRC staff before performing the surveys. As warranted, the NRC will conduct parallel and/or confirmatory radiation surveys and sampling to ensure that the licensee's conclusions are adequate.

Because 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 is available to licensees for a partial site release prior to LTP approval.

The rule also requires a licensee to evaluate the effect of releasing the property to ensure

that the licensee will continue to comply with all other applicable statutory and regulatory requirements that may be impacted by the release of property and changes to the site boundary. This includes, for example, regulations in 10 CFR Parts 20, 50, 72, and 100. In those instances involving license amendments, licensees are also required to provide a supplement to the existing environmental report to address the planned release. This requirement is similar to the requirement of 10 CFR 50.82(a)(9)(ii)(G).

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

### **Referenced Documents**

Copies of NUREG-1575 and NUREG-1757 may be examined, and/or copied for a fee, at the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. These documents are also accessible on the NRC Website (<http://www.nrc.gov>).

### **Voluntary Consensus Standards**

The National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113, requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or is otherwise impractical. In this final rule, the NRC standardizes the process for allowing a licensee to release part of its reactor facility or site for unrestricted use before NRC approves the LTP. This action does not constitute the establishment of a standard that establishes generally applicable requirements, and the use of a voluntary consensus standard is not applicable.

### **Finding of No Significant Environmental Impact: Availability**

The Commission has determined that under the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR Part 51 that this rule is not a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required.

There are no significant radiological environmental impacts associated with this action. This action does not involve non-radiological plant effluents and has no other environmental impact. Therefore, NRC expects that no significant environmental impact will result from this rule.

The Environmental Assessment and finding of no significant impact on which this determination is based are available for inspection at the NRC Public Document Room, 11555 Rockville Pike, Rockville, MD. Single copies of the Environmental Assessment and the finding of no significant impact are available from Harry Tovmassian, Office of Nuclear Reactor Regulation,

U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-3092.

### **Paperwork Reduction Act Statement**

This final rule contains information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). These requirements were approved by the Office of Management and Budget, approval number 3150-0011.

The burden to the public for these information collections is estimated to average 582 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments on any aspect of this information collection, including suggestions for reducing the burden, to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington DC 20555-0001, or by e-mail to *infocollects@nrc.gov*; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0132), Office of Management and Budget, Washington DC 20503.

### **Public Protection Notification**

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

### **Regulatory Analysis**

The Commission has prepared a Regulatory Analysis on this regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The analysis is available for inspection at the NRC Public Document Room, 11555 Rockville Pike, Rockville, MD. Single copies of the Regulatory Analysis are available from Harry Tovmassian, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-3092.

### **Regulatory Flexibility Certification**

In accordance with the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this rule does not have a significant economic impact on a substantial number of small entities. This rule affects only the licensing and operation of nuclear power plants. The companies that own these plants do not fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act or the Small Business Size Standards set out in 10 CFR 2.810.

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

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

## **Backfit Analysis**

The NRC has determined that the backfit rule does not apply to this rule; and therefore, a backfit analysis is not required for this final rule because these amendments do not involve any provisions that would impose backfits as defined in 10 CFR 50.109(a)(1). Section 50.75(g) of the final rule, which specifies new information collection and reporting requirements is not subject to the backfit rule, 10 CFR 50.109, inasmuch as information collection and reporting requirements are not within the purview of the backfit rule. The remaining requirements in this rule are voluntary and pertain only to licensees choosing to request a partial site release prior to approval of their license termination plan and are also not subject to the provisions of the backfit rule.

## **List of Subjects**

### 10 CFR Part 2

Administrative practice and procedure, Antitrust, Byproduct material, Classified information, Environmental protection, Nuclear materials, Nuclear power plants and reactors, Penalties, Sex discrimination, Source material, Special nuclear material, Waste treatment and disposal.

### 10 CFR Part 20

Byproduct material, Criminal penalties, Licensed material, Nuclear material, Nuclear power plants and reactors, Occupational safety and health, Packaging and containers, Radiation protection, Reporting and recordkeeping requirements, Source material, Special nuclear material, Waste treatment and disposal.

### 10 CFR Part 50

Antitrust, Classified information, Criminal penalties, Fire protection, Intergovernmental



relations, Nuclear power plants and reactors, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 553, the NRC is proposing to adopt the following amendments to 10 CFR Parts 2, 20, and 50.

## PART 2 - RULES OF PRACTICE FOR DOMESTIC LICENSING PROCEEDINGS AND ISSUANCE OF ORDERS

1. The authority citation for Part 2 continues to read as follows:

AUTHORITY: Secs.161, 181, 68 Stat. 948, 953, as amended (42 U.S.C. 2201, 2231); sec. 191, as amended, Pub. L. 87-615, 76 Stat. 409 (42 U.S.C. 2241); sec. 201, 88 Stat.1242, as amended (42 U.S.C. 5841); 5 U.S.C. 552.

Section 2.101 also issued under secs. 53, 62, 63, 81, 103, 104, 105, 68 Stat. 930, 932, 933, 935, 936, 937, 938, as amended (42 U.S.C. 2073, 2092, 2093, 2111, 2133, 2134, 2135); sec. 114(f), Pub. L. 97-425, 96 Stat. 2213, as amended (42 U.S.C. 10143(f)); sec. 102, Pub. L. 91-190, 83 Stat. 853, as amended (42 U.S.C. 4332); sec. 301, 88 Stat. 1248 (42 U.S.C. 5871). Sections 2.102, 2.103, 2.104, 2.105, 2.721 also issued under secs. 102, 103, 104, 105, 183i, 189, 68 Stat. 936, 937, 938, 954, 955, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2233, 2239). Section 2.105 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Sections 2.200-2.206 also issued under secs. 161 b, i, o, 182, 186, 234, 68 Stat. 948-951, 955, 83 Stat. 444, as amended (42 U.S.C. 2201 (b), (i), (o), 2236, 2282); sec. 206, 88 Stat 1246 (42 U.S.C. 5846). Section 2.205(j) also issued under Pub. L. 101-410, 104 Stat. 90, as amended by section 3100(s), Pub. L. 104-134, 110 Stat. 1321-373 (28 U.S.C. 2461 note). Sections 2.600-2.606 also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853, as amended (42 U.S.C. 4332). Sections 2.700a,

2.719 also issued under 5 U.S.C. 554. Sections 2.754, 2.760, 2.770, 2.780 also issued under 5 U.S.C. 557. Section 2.764 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 2.790 also issued under sec. 103, 68 Stat. 936, as amended (42 U.S.C. 2133), and 5 U.S.C. 552. Sections 2.800 and 2.808 also issued under 5 U.S.C. 553. Section 2.809 also issued under 5 U.S.C. 553, and sec. 29, Pub. L. 85-256, 71 Stat. 579, as amended (42 U.S.C. 2039). Subpart K also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Subpart L also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239). Subpart M also issued under sec. 184 (42 U.S.C. 2234) and sec. 189, 68 stat. 955 (42 U.S.C. 2239). Appendix A also issued under sec. 6, Pub. L. 91-560, 84 Stat. 1473 (42 U.S.C. 2135).

§ 2.1201 Scope of subpart.

(a) \* \* \*

(4) The amendment of a Part 50 license to release part of a power reactor 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.

\* \* \* \* \*

PART 20 - STANDARDS FOR PROTECTION AGAINST RADIATION

3. The authority citation for Part 20 continues to read as follows:

AUTHORITY: Secs. 53, 63, 65, 81, 103, 104, 161, 182, 186, 68 Stat. 930, 933, 935, 936, 937, 948, 953, 955, as amended, sec. 1701, 106 Stat. 2951, 2952, 2953 (42 U.S.C. 2073, 2093, 2095, 2111, 2133, 2134, 2201, 2232, 2236, 2297f), secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

4. In § 20.1401, paragraphs (a) and (c) are revised to read as follows:

§ 20.1401 General provisions and scope.

(a) The criteria in this subpart apply to the decommissioning of facilities licensed under Parts 30, 40, 50, 60, 61, 63, 70, and 72 of this chapter, and release of part of a facility or site for unrestricted use in accordance with § 50.83 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, 61, 63), 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.

\* \* \* \* \*

(c) After a site has been decommissioned and the license terminated in accordance with the criteria in this subpart, or after part of a facility or site has been released for unrestricted use in accordance with § 50.83 of this chapter and in accordance with the criteria in this subpart, the Commission will require additional cleanup only if based on new information, it determines that the criteria of this subpart were not met and residual radioactivity remaining at the site could result in significant threat to public health and safety.

\* \* \* \* \*

PART 50 - DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

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

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

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951, as amended by

Pub. L. 102-486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 936, 955, as amended (42 U.S.C. 2131, 2235); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd), and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80 - 50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

6. Section 50.2 is amended by adding “Historical site assessment,” “Impacted areas,” and “Non-impacted areas” in alphabetical order to read as follows:

§ 50.2 Definitions.

\* \* \* \* \*

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 mean the areas with some reasonable potential for residual radioactivity in excess of natural background or fallout levels.

\* \* \* \* \*

Non-impacted areas mean the areas with no reasonable potential for residual radioactivity in excess of natural background or fallout levels.

\* \* \* \* \*

7. In § 50.8, paragraph (b) is revised to read as follows:

§ 50.8 Information collection requirements: OMB approval

\* \* \* \* \*

(b) The approved information collection requirements contained in this part appear in §§50.30, 50.33, 50.33a, 50.34, 50.34a, 50.35, 50.36, 50.36a, 50.36b, 50.44, 50.46, 50.47, 50.48, 50.49, 50.54, 50.55, 50.55a, 50.59, 50.60, 50.61, 50.62, 50.63, 50.64, 50.65, 50.66, 50.68, 50.71, 50.72, 50.74, 50.75, 50.80, 50.82, 50.83, 50.90, 50.91, 50.120, and Appendices A, B, E, G, H, I, J, K, M, N, O, Q, R, and S to this part.

\* \* \* \* \*

8. In § 50.75, paragraph (g)(4) is added to read as follows:

§ 50.75 Reporting and recordkeeping for decommissioning planning.

\* \* \* \* \*

(g) \* \* \*

(4) Records of:

(i) The licensed site area, as originally licensed, which must include a site map and any acquisition or use of property outside the originally licensed site area for the purpose of receiving, possessing, or using licensed materials;

(ii) The licensed activities carried out on the acquired or used property; and

(iii) The release and final disposition of any property recorded in paragraph (g)(4)(i) of this section, the historical site assessment performed for the release, radiation surveys performed to support release of the property, submittals to the NRC made in accordance with § 50.83, and the methods employed to ensure that the property met the radiological criteria of 10 CFR Part 20, Subpart E, at the time the property was released.

9. In § 50.82, paragraph (a)(9)(ii)(H) is added and paragraph (a)(11)(ii) is revised to read as

follows:

§ 50.82 Termination of license.

\* \* \* \* \*

(a) \* \* \*

(9) \* \* \*

(ii) \* \* \*

(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 final radiation survey and associated documentation, including an assessment of dose contributions associated with parts released for use before approval of the license termination plan, demonstrate that the facility and site have met the criteria for decommissioning in 10 CFR Part 20, Subpart E.

\* \* \* \* \*

10. A new § 50.83 is added to read as follows:

§ 50.83 Release of part of a power reactor facility or site for unrestricted use.

(a) Prior written NRC approval is required to release part of a facility or site for unrestricted use at any time before receiving approval of a license termination plan. Section 50.75 specifies recordkeeping requirements associated with partial release. Nuclear power reactor licensees seeking NRC approval shall - -

(1) Evaluate the effect of releasing the property to ensure that - -

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

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

(iii) Effluent releases remain within license conditions;

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

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

(vi) All other applicable statutory and regulatory requirements continue to be met.

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

(3) Perform surveys adequate to demonstrate compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402 for impacted areas.

(b) For release of non-impacted areas, the licensee may submit a written request for NRC approval of the release if a license amendment is not otherwise required. The request submittal must include - -

(1) The results of the evaluations performed in accordance with paragraphs (a)(1) and (a)(2) of this section;

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

(3) The schedule for release of the property;

(4) The results of the evaluations performed in accordance with § 50.59; and

(5) A discussion that provides the reasons for concluding that the environmental impacts associated with the licensee's proposed release of the property will be bounded by appropriate previously issued environmental impact statements.

(c) After receiving an approval request from the licensee for the release of a non-impacted area, the NRC shall - -

(1) Determine whether the licensee has adequately evaluated the effect of releasing the property as required by paragraph (a)(1) of this section;

(2) Determine whether the licensee's classification of any release areas as non-impacted is adequately justified; and

(3) Upon determining that the licensee's submittal is adequate, inform the licensee in writing that the release is approved.

(d) For release of impacted areas, the licensee shall submit an application for amendment of its license for the release of the property. The application must include - -

(1) The information specified in paragraphs (b)(1) through (3) of this section;

(2) The methods used for and results obtained from the radiation surveys required to demonstrate compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402; and

(3) 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.

(e) After receiving a license amendment application from the licensee for the release of an impacted area, the NRC shall - -

(1) Determine whether the licensee has adequately evaluated the effect of releasing the property as required by paragraph (a)(1) of this section;

(2) Determine whether the licensee's classification of any release areas as non-impacted is adequately justified;

(3) Determine whether the licensee's radiation survey for an impacted area is adequate; and

(4) Upon determining that the licensee's submittal is adequate, approve the licensee's amendment application.

(f) The NRC shall notice receipt of the release approval request or license amendment



application and make the approval request or license amendment application available for public comment. Before acting on an approval request or license amendment application submitted in accordance with this section, the NRC shall conduct a public meeting in the vicinity of the licensee's facility for the purpose of obtaining public comments on the proposed release of part of the facility or site. The NRC shall publish a document 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.

Dated at Rockville, Maryland, this \_\_\_\_ day of \_\_\_\_\_, 2002.

For the Nuclear Regulatory Commission.

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Annette L. Vietti-Cook  
Secretary of the Commission

***ATTACHMENT 2***  
***REGULATORY ANALYSIS***

## REGULATORY ANALYSIS

### FINAL RULE – 10 CFR 50.83

#### Release of Part of a Facility or Site for Unrestricted Use Before the NRC Approves the License Termination Plan

##### I. STATEMENT OF THE PROBLEM

The decommissioning and license termination rules of 10 CFR Parts 20 and 50 contain requirements to ensure that reactor facility decommissioning will be accomplished without undue impact on the public health and safety and the environment. The impact would arise from radioactivity remaining in structures, materials, soils, groundwater, and other media at a reactor site after the reactor license is terminated. Subpart E of 10 CFR Part 20 contains the radiological criteria for release of the reactor site following decommissioning. Under current regulations, a reactor licensee may sell part of its site before it has applied the radiological criteria for license termination to the property (i.e., before it submits its license termination plan, or LTP). This type of transfer of property from an NRC licensee is termed a “partial site release.” Current regulations do not require NRC approval if the release does not involve the transfer of licensed material. Existing regulations force the NRC to consider changes to the site boundary of a reactor site on a case-by-case basis to ensure adequate protection of the public and the environment.

Several reactor licensees have expressed interest in selling parts of their sites before they receive approval of their LTPs. The NRC believes that partial release issues should be resolved generically. The rulemaking provides a regulatory framework to address the situations and to help ensure that the issues are considered consistently and efficiently.

##### Background

In its review of the proposed sale of property that is part of the Oyster Creek plant site, the staff concluded that there was a gap in the regulations with respect to the partial release of power reactor sites or facilities. The staff is encountering similar issues in recent discussions with the Haddam Neck and Maine Yankee licensees, two power reactors undergoing decommissioning.

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 when proposing a partial site release. Nor do the rules require a licensee to submit information necessary for the staff to evaluate the adequacy of a licensee’s partial site release. Concerns have been raised that without a rulemaking, a licensee could adopt a piecemeal approach to reduce the size of its site and avoid applying the criteria in the license termination rule when the licensee eventually requests termination of its 10 CFR Part 50 license.

To address the regulatory gap in 10 CFR Parts 20 and 50, the staff has initiated a rulemaking to accomplish the following:

- (1) Standardize the process for allowing a licensee to release part of its reactor facility or site for unrestricted use before receiving approval of its LTP,

- (2) Ensure that residual radioactivity remaining from licensed activity in areas released for unrestricted use will meet the radiological criteria for license termination,
- (3) Maintain public confidence, and
- (4) Make efficient use of NRC and licensee resources.

The rule adds a new section to 10 CFR Part 50, separate from the decommissioning and license termination rules, that identifies the criteria and regulatory framework that a licensee would use to request NRC approval of a partial site release. It is narrowly focused on operating and decommissioning power reactors. Furthermore, the rule does not provide for partial site release under restricted conditions.

In order for the staff to evaluate the adequacy of the licensee's plans for partial site release, the rule requires licensees to submit information necessary to demonstrate the following:

- The released property satisfies the radiological criteria for unrestricted use in 10 CFR Part 20, Subpart E, Section 1402 (0.25 mSv/yr [25 mrem/yr] to the average member of the critical group and as low as reasonably achievable).
- The licensee will continue to comply with all other applicable regulatory requirements that may be impacted by the release of property and changes to the site boundary. This would include, for example, regulations in 10 CFR Parts 20, 50, 72, and 100.
- Records of property line changes and the radiological conditions of partial site releases are being maintained to ensure that the dose from residual material associated with these releases can be accounted for at the time of any subsequent partial releases and at the time of license termination.

The approval process by which the property would be released depends on the radiological classification of the area to be released, as defined using the MARSSIM (Multi-agency Radiation Survey and Site Investigation Manual) protocol (Reference 1). For proposed release areas classified as *non-impacted* and, therefore, having no reasonable potential for residual radioactivity and whose release would not adversely affect reactor safety, the staff would approve the release by letter. For areas classified as *impacted* and, therefore, having some reasonable potential for residual radioactivity, the rule specifies that a license amendment request be submitted for NRC review. The amendment request would include the licensee's demonstrated compliance with the radiological criteria for unrestricted use specified in 10 CFR Part 20, Subpart E. Regulatory guidance for performing this demonstration is contained in NUREG-1727 (Reference 2).

#### Existing Regulatory Framework

The decommissioning and license termination rules of 10 CFR Parts 20 and 50 contain requirements to ensure that reactor facility decommissioning will be conducted without undue impact on public health and safety and the environment. Section 50.82, "Termination of license," provides the requirements for decommissioning and license termination of power reactor facilities

and references Subpart E of 10 CFR Part 20. Section 20.1402 contains the criteria for unrestricted release.

The staff determines that the licensee has met the license termination criteria using information submitted by the licensee in its LTP and final radiation survey. The LTP is not required until 2 years before the anticipated date of license termination. The final radiation survey is not required until after the licensee completes its decontamination activities. These requirements were based on the NRC's anticipation that reactor licensees would permanently cease operations and then perform the decommissioning and license termination of the site as one large project.

Under the current case-by-case approach applied to partial site release proposals, the regulations do not clearly state what radiological criteria apply. The staff's recent response to the proposed sale of parts of Oyster Creek's site stipulated that a number of actions be taken to ensure that the property sold would meet the radiological release criteria of 10 CFR Part 20. The rule helps to standardize the process for allowing a licensee to release part of its reactor facility or site for unrestricted use on the basis of the criteria used for license termination.

A number of other regulations pertain to the definition of reactor sites and to their expected use during the life of the licensed facility. Definitions and requirements for power reactor sites are contained in Part 100. Section 100.10, "Factors to be considered when evaluating sites," lists considerations used in determining the acceptability of sites, including the expected uses of the site environs and the exclusion area. Section 100.3 defines exclusion area as that area surrounding the reactor in which the reactor licensee has the authority to determine all activities, including exclusion or removal of personnel and property from the area. Section 20.1003 defines the site boundary as that line beyond which the land or property is not owned, leased, or otherwise controlled by the licensee. Paragraph (b)(1) of Section 50.34, "Contents of applications; technical information," requires the final safety analysis report to include all current information on site evaluation factors identified in Part 100, such as those in Section 100.10.

NRC Regulatory Issue Summary (RIS) 2000-19 (October 24, 2000) provided licensees with the NRC's plans for handling partial site release approval requests pending a final rulemaking. The RIS guidance informed licensees considering partial site release of the information needed by the NRC in order to facilitate NRC evaluation. With implementation of a final rule, the provisions of the RIS are superceded.

The NRC published the proposed rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination," in the Federal Register on September 4, 2001 (66 FR 46230). The NRC received 11 comment letters on the proposed rule. These comments and responses are discussed in the "Comments on the Proposed Rule" section of the Federal Register notice publishing the final rule.

## **II. OBJECTIVE OF THE RULE**

The objective of this rulemaking is to standardize the process for allowing a licensee to release part of its reactor facility or site for unrestricted use before receiving approval of its LTP. The rule ensures that parts of a reactor site released for unrestricted use meet the radiological criteria for license termination, even if parts of the site are released before NRC approval of the LTP. The

rule is intended to make clear that the radiological criteria of 10 CFR Part 20, Subpart E, (0.25 mSv/yr [25 mrem/yr] to the average member of the critical group and as low as reasonably achievable), applies to a partial site release.

The rule requires licensees to submit information necessary to demonstrate that the proposed release is in compliance with the radiological criteria for unrestricted use. This issue was extensively considered in the rulemaking establishing the radiological criteria for license termination (Reference 3). The Commission promulgated this rule to ensure that the level of protection to individuals from radiological exposure for a partial site release is the same as for termination of a power reactor facility license.

The rule is applicable only to Part 50 licensees of operating and decommissioning nuclear power reactors. It addresses two situations, depending on the potential for residual radioactivity present in the area proposed for release. First, for areas classified as impacted, and, therefore, having some reasonable potential for residual radioactivity, the licensee would submit a license amendment request with the licensee's demonstration of compliance with the radiological criteria for unrestricted use specified in 10 CFR Part 20, Subpart E, Section 1402. Second, for proposed release areas classified as *non-impacted* and, therefore, having no reasonable potential for residual radioactivity, and where a license amendment is not otherwise required or desired by the licensee, the NRC can approve the action by letter upon determining that the licensee has met the criteria of the rule.

In contrast to the license termination process, the rule does not require a license amendment in all cases to release property for unrestricted use. The staff believes this difference is justified for two reasons. First, the license termination process was created to treat the facility or site as a whole, which inevitably involves considering residual radioactivity above background levels, such as that found in plant systems. The partial site release rule preserves the license amendment approach for cases in which the area to be released is radiologically impacted and requires that the dose meet the radiological criteria for unrestricted use. Second, for cases in which the change does not adversely affect reactor safety and the area is demonstrated to not be radiologically impacted, the level of NRC review for a license amendment is not required. The review of the proposed release would essentially be an inspection/enforcement review to determine if it would meet applicable criteria.

In some cases, license conditions or technical specifications in a reactor license may define the licensed site in detail, or include a map showing the boundaries of the licensed site. In these cases, a reactor licensee would submit a license amendment application for a partial site release, regardless of the amount of residual radioactivity in the area to be released, because the licensed site would change. However, under current regulations, a licensee could amend its license to remove the definition of the site boundary without mentioning a partial site release and then proceed to partially release the site without obtaining NRC approval. The rule requires NRC approval for a partial site release regardless of the amount of detail in the licensed site description in the operating license or technical specifications.

If license conditions or technical specifications for a Part 50 or 72 license require the site boundary to follow a particular line or to have certain dimensions, the technical issues must be resolved before the license can be amended. The rule does not relieve a licensee from this requirement.

The rule provides for public participation. The NRC will notice receipt of a licensee's proposal for a partial release, regardless of the amount of residual radioactivity involved, and make the proposal available for public comment. The NRC will also hold a public meeting in the vicinity of the site to discuss the licensee's letter request or license amendment application, as applicable. The rule amends 10 CFR Part 2 to provide the opportunity for an informal hearing if a license amendment involving a partial site release is challenged. The rule applies only when a reactor licensee intends to partially release a site before receiving approval of its LTP. As part of its LTP, a licensee may propose releasing its site in stages. The staff will evaluate the licensee's plan and if it is adequate, approve it by approving the license amendment for the LTP. Once the LTP has been approved, partial site releases (as subsequent revisions to the LTP), would require NRC approval via license amendment unless the LTP itself contained a sufficient change process or described staged releases of the property prior to license termination.

The rule does not allow a partial site release under restricted conditions. Restricted conditions are conditions in which the criteria for unrestricted release are not met. Current regulations require a licensee to submit its LTP before it can use the radiological criteria 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.

### **III. ALTERNATIVES**

The staff considered three alternative options for this rule. For the reasons discussed, the NRC is implementing option two.

OPTION 1: No rulemaking – Address proposals to release a part of a power reactor facility or site on a case-by-case basis.

Advantage: No resources spent on rulemaking.

Disadvantages:

- The lack of regulations specifically applying the radiological criteria for unrestricted use to a partial site release could result in a dose to the public in excess of the limits specified in 10 CFR Part 20, Subpart E.
- The lack of regulations providing a standardized process for requesting approval of a partial site release could result in the application of inconsistent or unnecessary standards to licensees and unnecessary expenditure of industry and NRC resources in determining appropriate standards and processes for each case.
- The lack of regulations providing a standardized process for requesting approval for a partial site release might allow a licensee to take actions that adversely affect the ultimate decommissioning of the site or to adopt a piecemeal approach to reducing the size of its site in order to avoid applying the license termination criteria.

OPTION 2: Proceed with a narrowly focused rulemaking to revise 10 CFR Parts 2, 20, and 50 to address partial releases of power reactor sites.

Advantages:

- Provides clear regulation of partial releases for operating and permanently shutdown power reactor plants.
- Ensures that the ultimate decommissioning of the site will not be adversely affected and that the radiological consequences of a partial site release do not present an undue risk to public health and safety.
- Allows greater licensee and NRC efficiency in 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 the regulatory process for partial site releases.

Disadvantages:

- Resources spent on rulemaking.
- Additional reporting and record keeping required of licensees.

OPTION 3: Conduct a broad scope rulemaking to revise 10 CFR Parts 2, 20, 30, 40, 50, 70, and 72 to address partial site releases at a variety of facility types.

Advantages:

- Same as Option 2 for power reactor licensees.
- For all classes of licensees, provides greater consistency for partial releases.
- May improve overall efficiency by addressing partial releases of all types of facilities in a single, large effort.

Disadvantages:

- Short-term resource expenditures to expand the scope of rulemaking would be significant because of the larger number and diversity of stakeholders.
- The different schedules and operating environments for decommissioning materials and research reactor facilities would result in some differences in the requirements for partial site releases in any case.
- The approval of power reactor licensee partial release proposals could be delayed because of the time needed to address the greater complexity of including research reactor and Parts 30, 40, 70, and 72 licensees in the rulemaking.



Option 1, the no-action alternative, is not a preferred option because it would not address the concern that continued regulation of partial site release on a case-by-case basis would be inconsistent and inefficient. The lack of a standardized process for partial site release could jeopardize the effectiveness of the ultimate decommissioning of a facility if the radiological standards of 10 CFR Part 20 were not properly applied. The current situation could also allow licensees to pursue partial site releases that circumvent the intent of the license termination rule by using a piecemeal approach to clearing property for unrestricted use. These safety considerations were an important factor in the NRC's determination that this option was not acceptable.

Option 3, a broad rulemaking addressing partial site releases at a variety of facility types, is not a preferred option because it is not expected to provide the timely rulemaking necessary to address several near-term proposed partial releases of power reactor sites. Partial site releases for materials licensees are addressed to a limited extent in other regulations (i.e., Parts 30, 40, 70, and 72). The rule changes the requirements for power reactor sites but will not affect licensees of materials or research reactor sites. In the future, the staff may consider changes to the regulations for materials licensees to make the requirements consistent with the rule for reactor licensees.

The following evaluation considered the values and impacts of Option 2 relative to the current situation, or Option 1.

#### **IV. EVALUATION OF VALUES AND IMPACTS**

This section evaluates values (benefits) and impacts (costs) associated with rulemaking Option 2 in comparison with the no-action alternative. The staff analysis quantifies a number of factors, but some were considered mostly on qualitative grounds.

The costs and benefits associated with decommissioning were analyzed in detail in the Generic Environmental Impact Statement (GEIS) (Reference 3) and the regulatory analysis accompanying the 1997 final rule on radiological criteria for license termination (Reference 4). The rule for partial site release uses the existing radiological criteria for license termination, and partial site releases are expected to involve many of the same licensee activities that would be conducted during decommissioning and license termination. Therefore, the staff used information from past analyses in References 3 and 4 for this analysis. The costs of surveys and remediation for a specific partial site release are expected to typically be less than for these activities during decommissioning and license termination of a reactor facility. Accordingly, the staff used its judgment in applying site-wide costs to represent a typical partial site release. The site-specific nature of factors involved in partial site releases makes it difficult to arrive at a generically applicable analysis of the costs involved. Although the staff intended to represent a typical case, an analysis for a particular site may differ from the staff's estimates.

In conducting this evaluation, the staff followed NRC guidelines for conducting regulatory analyses (References 5 and 6), using the prescribed 7-percent annual rate to adjust 1988 dollar values to 2001 dollar values. The staff also performed a sensitivity analysis using a 3-percent annual rate to determine if the results would be significantly affected. Uncertainty in the estimates arises from the NRC's relative inexperience in reviewing partial site release requests and from the large

number of factors that could increase or reduce the costs at a particular site relative to the typical case. Therefore, the estimates given here should be regarded as scoping values rather than precise limits in the range of actual partial site release costs for a site.

The rule includes new requirements, such as a public meeting and submittal of a request for NRC review and approval. The staff estimated the costs of the new requirements to the NRC and the industry. The benefits to licensees could vary significantly, depending on the value of the real estate involved, local taxes, the costs of maintaining the property, and so on. The staff did not attempt to estimate licensee benefits. Benefits to the public, in the form of adverse health effects averted under the rule, were difficult to estimate based on previous analyses in the GEIS (Reference 4), as described later.

The staff analysis quantifies costs of (1) licensee preparation and NRC review of the request for partial site release, (2) holding the public meeting, (3) surveys and remediation activity to support release under the license termination rule criteria, and (4) record keeping by the licensee. Benefits considered in the analysis are limited to estimated health consequences associated with executing partial release using license termination criteria. However, the wide variation in the estimate of health benefits from the analysis in Reference 4 precluded a direct comparison of costs to benefits.

#### Preparation and Review of a Licensee's Request

The rule requires that a licensee pursuing partial site release submit either a letter requesting approval to release a portion of its site or a license amendment application requesting approval of the action, depending on whether the site is radiologically impacted. In either case, the licensee would provide certain information that the NRC would use in evaluating the proposed release. This information includes the following:

- a. the results of a safety evaluation of the release of the part of the existing licensed facility,
- b. the basis for determining that the radiological criteria for release are satisfied,
- c. a description of the area or facility under consideration, and
- d. a supplement to the environmental report describing any significant new environmental effects associated with the proposed property release or the reasons for concluding that the environmental impacts associated with the proposed release will be bounded by appropriate previously issued environmental impact statements.

The NRC will use this information to determine whether the proposed release meets regulatory requirements.

In these respects, the rule differs little from a case-by-case consideration of proposed releases because it is expected that the licensee and NRC would engage in nearly the same activities to ensure that 10 CFR Part 20 release criteria are satisfied for unrestricted release. This was the case with the Oyster Creek licensee's recent proposal (discussed earlier). However, because the submittal is a regulatory requirement under the rule, the staff sought to estimate its impact.

Under the rule, NRC review of a partial site release is necessary whether or not the licensee submits a letter request or a license amendment application. It is reasonable to expect that it will take less effort for a licensee to prepare and the NRC to review a letter proposing the release of an area that is not radiologically impacted than a license amendment to release an area that is radiologically impacted. In addition, licensees may choose to submit a license amendment

application for the release of an area that is not radiologically impacted. Therefore, the staff estimated costs of both cases.

The staff used approximate values for licensee and NRC costs from NUREG/CR-4627 (Reference 7), which estimates costs for “typical” and “complicated” technical specification changes. The staff assumed that the release of contaminated or potentially contaminated areas would require documented surveys. Such releases would incur costs equivalent to a “complicated” amendment. A release of property not requiring the same level of effort and not involving a license amendment was assessed as the “typical” license amendment case in Reference 7. Using these assumptions, and adjusting the 1988 NUREG/CR-4627 estimates upward to reflect 7-percent annual inflation, the staff estimated that the licensee’s cost of preparing a partial release request would range from \$43,000 to \$84,000, depending upon whether it deals with an impacted area (or \$37,000 to \$72,000, assuming a 3-percent annual inflation rate).

NRC licensing action costs are based on dollar values, rather than on staff full-time-equivalent positions, using values given in Reference 7. Again, adjusted to 2001 dollars, the NRC review cost would range from \$27,000 to \$51,000, depending upon whether it deals with an impacted area (or \$24,000 to \$44,000, assuming a 3-percent annual inflation rate).

The staff compared this estimated range to the NRC resources actually used to review the proposed partial site release at Oyster Creek. The staff review totaled 447 hours, or about \$33,000 at a rate of \$75 per staff hour. The inspection effort was estimated to be approximately 0.5 full-time staff equivalent, or about \$55,000 (at \$75 per staff-hour). The total NRC effort to review the Oyster creek proposal was greater than the estimate based on the Reference 7 analysis. This result is not unexpected because the Oyster Creek action was unique, and the costs would be expected to decrease as the NRC staff gained experience in similar reviews. Therefore, the staff considers the estimate reasonable for the typical case after the first few reviews are completed.

#### Public Meeting

The rule requires that a public meeting be held before the release is approved to serve as a forum for public comments on the proposed release. The staff estimated the NRC and licensee costs associated with the meeting on the basis of recent experience involving public meetings for license termination and decommissioning. The meetings envisioned under the rule are expected to involve the same preparation and costs as the past meetings.

The staff estimated that the combined preparation, travel, and follow up activities would consume approximately \$15,000 of NRC resources and would cost a licensee about \$22,000 (the difference exists because a higher labor rate is used for licensee staff effort than for NRC staff).

#### Licensee Partial Site Release Activities

A licensee proposing release of a portion of its site must conduct certain activities to demonstrate that the area under consideration meets the radiological release criteria for unrestricted release. The activities include radiological characterization surveys, remediation of site media (such as soil), and final surveys. The costs of these activities were estimated in detail for the analyses in

Reference 4. The staff judged that the results of the analyses assuming site decommissioning for license termination were applicable to partial site release because the basic activities would be the same.

In Reference 4, the staff estimated the costs of soil remediation and site surveys for an entire site to be in the range of \$200,000 in 1997 dollars. Mobilizing a survey and remediation effort for a potentially contaminated portion of a reactor site would involve almost the same level of effort, and the expenses probably would be in the same range as that estimate. Assuming a 7-percent annual rate of inflation adjusts this value to about \$260,000 in 2001 dollars (the 3-percent value is \$225,000). The staff assumed that remediation would be involved in the typical partial site release case. However, the staff expects that partial site releases of non-impacted areas will involve fewer, if any, surveys and little remediation, and the expense for licensees would be less than this estimate.

### Record keeping

The rule requires licensees to maintain property records and records of the radiological conditions of the entire licensed site area (past and present). Licensees are also required to preserve information about partial releases from the licensed site. Upon decommissioning for license termination, these records would provide information to help ensure licensee compliance with the release criteria of the license termination rule for the entire licensed site area.

The requirements that licensees maintain records of property line changes and of the radiological conditions of partially released sites ensure that these conditions can be adequately considered at the time of any subsequent partial releases and at the time of license termination. The entire site, as defined in the original license and subsequent modifications to the licensed site boundary, is to be included in the LTP to ensure that the entire area meets the radiological release requirements 10 CFR Part 20, Subpart E, at the time the license is terminated. These requirements ensure that the level of protection from radiological exposure for a partial site release is the same as for license termination of a power reactor facility.

The record keeping requirement of the rule is not new. Under Section 50.75, "Reporting and record keeping for decommissioning planning," licensees are required to "keep records of information important to the safe and effective decommissioning of the facility ... until the license is terminated by the Commission." The regulation states that records of occurrences involving the spread of contamination in and around the site should be retained. This information is necessary to classify the site in preparation for decommissioning activities. The Statement of Considerations for the proposed rule on decommissioning criteria for nuclear facilities (Reference 8) further emphasized the need for information on the facility site so that decommissioning can be effectively accomplished.

The purpose of the License Termination Rule (LTR) [61 FR 39301; July 29, 1996, as amended at 62 FR 39091; July 21, 1997] and 10 CFR 50.82 is to ensure that any residual radioactivity associated with licensed activity is within the radiological release requirements of 10 CFR Part 20, Subpart E, at the time the license is terminated. Although not previously codified, the requirement to maintain records of the entire site as defined in the original license, along with subsequent modifications to the site boundary, clarifies the intent of the LTR and is necessary to ensure that potential dose contributions from the entire area can be adequately considered in demonstrating compliance with the release criteria. The required record keeping, therefore, applies to all

licensees, including those who modify the site boundary by releasing a part of their site prior to NRC approval of their LTP. It is expected that licensees are already maintaining property records in order to comply with the LTR at the time of license termination and, therefore, the record keeping requirement does not establish new policies, standards, or requirements not already inherent to compliance with the radiological release criteria of the LTR. Because some period for implementation may be needed by some licensees based on comments received to the proposed rule, a 6-month implementation period to establish the required record keeping is provided in the final rule.

The record keeping requirements are expected to increase existing record keeping requirements only slightly. The retention of records is considered a good practice, and because the records will be generated in any case before the license is terminated, their retention is not considered an undue burden.

### Health, Safety, and Environmental Effects

An important objective of the rule is to ensure that any property released before approval of the LTP meets the unrestricted release criteria in 10 CFR Part 20, Subpart E. The rulemaking for the final rule on radiological criteria for license termination (Reference 3) included the Part 20 requirements and considered the risk to the public health and safety in detail. The Generic Environmental Impact Statement (GEIS, Reference 4) for the 1997 final rule provided the assumptions used and results of the value-impact analysis. The GEIS showed that the cost-benefit for soil cleanup at a power reactor could vary over a wide range, depending upon factors that are largely plant-specific. The results for remediation to the 0.25 mSv/yr [25 mrem/yr] criterion range from a very high cost per death averted to a negative health effect. Because of these results, the staff did not rely on quantification of health effects for the license termination rule and used other reasoning to justify the choice of the 0.25 mSv/yr [25 mrem/yr] criterion.

The reasoning that the staff used was documented in References 3 and 4. The justification hinged on the consensus from independent studies that the limit for public dose should be 1.0 mSv/yr [100 mrem/yr] from all manmade sources. With this in mind, any single source should then be some fraction of 1.0 mSv/yr [100 mrem/yr]. The staff concluded that the 0.25 mSv/yr [25 mrem/yr] criterion for site release for license termination would preclude an individual's dose from exceeding 1.0 mSv/yr [100 mrem/yr] from a number of separate sources.

In light of the staff's difficulties encountered in quantifying the health benefits associated with the license termination clearance criteria, the staff has not attempted to further refine that analysis for this rule. The staff accepts the safety conclusions set forth in the license termination rule. By using the same radiological criterion, the staff does not anticipate that the rule will have any unforeseen adverse effect on public health and safety.

### Comparison of Alternatives

In this analysis, the staff has compared only Option 2, the partial site release rule, to the current situation. The following table summarizes the NRC and licensee costs considered in the preceding analysis.

**Final Rule Estimated Costs<sup>1</sup>** (Thousands in 2001 Dollars)

	7 Percent Inflation <sup>2</sup>			3 Percent Inflation <sup>2</sup>		
	NRC	Licensee	Total	NRC	Licensee	Total
Submittal Preparation/Review	27-51	43-84	70-135	24-44	37-72	61-116
Public Meeting	15	22	37	15	22	37
Surveys/Remediation	—	260	260	—	225	225
Record keeping	—	nil	nil	—	nil	nil
Totals	42-66	325-366	367-432	39-59	284-319	323-378

1 - Costs are per partial site release action.

2 - Inflation adjustment used only for cost data that were not already in 2001 dollars.

The first observation the staff made was that the sensitivity analysis using a 3-percent inflation rate did not appreciably change the results. Considering other uncertainties, such as plant-specific variables, the results from using the two values can be assumed to be roughly equivalent. The second observation is that licensees will incur significant costs only for those partial site release requests involving radiologically impacted areas that will require surveys and remediation. Licensees will need to determine if the one-time costs, such as those shown here, compare favorably to the potential benefit that could be gained, such as from sale of property that is released. However, the costs estimated in this analysis appear to be nominal compared to probable real estate values in the proximity of some facilities. The staff judged that the costs considered here would probably not be significant factors preventing licensees from pursuing partial site releases.

The staff estimated that the total licensee cost would range from \$325,000 to \$366,000 and that NRC costs could be as high as \$66,000. The staff expects that, on average, two licensees will request partial site releases each year. Therefore, the total annual costs for licensees and the NRC could be as high as \$732,000 and \$132,000, respectively.

These relatively modest costs are one-time expenditures associated with the release of a portion of a site. The staff does not consider the costs an undue burden on licensees nor an unacceptable regulatory burden to NRC. Therefore, the analysis supports Option 2 for the final rule. Option 3 was not considered a viable alternative because the rulemaking would take much longer, thereby delaying implementation of the rule to address a regulatory gap that could seriously undermine the effectiveness and safety of eventual decommissioning at a site. The health and safety benefit was quantified for the final rule on radiological criteria for license termination but varied over such a wide range that it is not useful in this analysis, except to demonstrate that a favorable cost-benefit ratio could be achieved under the license termination release criteria. The final partial site release rule provides a level of safety commensurate with that expected for releases of sites for unrestricted use under the license termination rule. The staff judged that because of the relatively modest impact on NRC and licensee resources, and the need to address the regulatory gap, the rule should be implemented following Option 2.

### Backfit Considerations

The NRC has determined that the backfit rule does not apply to this rule; therefore, a backfit analysis is not required because it does not involve any provisions that would impose backfits as defined in 10 CFR 50.109(a)(1). The rule clarifies the application of the license termination rule (LTR) for partial site release and the relationship between partial site release and decommissioning of a site under 10 CFR 50.82. A backfit analysis was not required for the LTR because it did not involve reactor operations and it was not required for 10 CFR 50.82 because that rule was imposed to ensure adequate protection of the public health and safety. Since backfit analyses were not required for either the LTR or for 10 CFR 50.82, it would not appear to be needed for this rulemaking action.

Additionally, the purpose of the LTR and 10 CFR 50.82 is to ensure that the residual radioactivity from the licensed activity is within the criteria of the LTR. The LTR requires that any previously approved onsite disposals be reconsidered in determining releases under the LTR. As to previously approved offsite releases, Section F.2.3 of the Statement of Considerations for the final LTR describes a limited grand fathering for previously approved partial site releases. The NRC stated that guidance would be issued on how licensees should address previously released portions of licensed sites. Consequently, while a previously approved partial site release meeting the LTR criteria would not need to be reconsidered, absent new information in accordance with 10 CFR 20.1401(c), it was not the intent of the rule that interaction from the previously released residual radiation would not need to be considered in the release decision for the remaining portions of the site. To not read the LTR as requiring the radiation interactions from the previously released site to be considered in making release determinations on the remaining site would permit a licensee to release a site that would otherwise not meet the LTR criteria by releasing the site by segments, each one below the criteria of the LTR. Such an approach would defeat the intent of the LTR to consider all the residual radioactivity from the licensed activity in meeting the LTR criteria. This rulemaking clarifies the intent of the LTR and does not establish new policies or standards.

### Impacts on Other Programs and Other Agencies

The Environmental Protection Agency (EPA) and State governments will be the government entities most directly affected by the rule. The interest of EPA and the States in partial site releases, like their current interest in decommissioning and license termination activities, will primarily concern the criteria used for declaring property cleared for unrestricted use. EPA and the States will probably participate in public meetings and coordinate with NRC in evaluating proposed partial site releases.

The NRC has sought clearance from the Office of Management and Budget for the information collection requirements of the rule.

The rule may affect similar actions taken by non-reactor NRC licensees because the process established by this rule may be instituted on a case-by-case basis for other facilities seeking partial releases.



## **V. DECISION RATIONALE**

The regulatory analysis documented herein led the NRC to conclude that the rule will impose moderate costs on the NRC and on licensees proposing to pursue partial site releases. The staff did not estimate the material benefits to licensees that obtain approval for partial site releases. The objective of the rule is to help ensure the effectiveness of decommissioning and license termination efforts that would eventually follow partial site releases. Therefore, the staff judged that the rule offers health and safety benefits commensurate with the benefits of existing license termination requirements for power reactors, while imposing only modest impacts on NRC and the industry. On this basis, the staff recommended rulemaking alternative Option 2.

## **VI. IMPLEMENTATION**

The final rule will become effective 30 days after publication in the *Federal Register*. An additional 6-month implementation period is provided for establishing the required record keeping.

## **VII. REFERENCES**

1. "Multi-agency Radiation Survey and Site Investigation Manual (MARSSIM)," NUREG-1575, Revision 1, August 2000.
2. "NMSS Decommissioning Standard Review Plan," NUREG-1727, September 2000.
3. "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities," NUREG-1496, Volume 1, July 1997.
4. "Radiological Criteria for License Termination," 62 FR 39058, July 21, 1997.
5. "Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission," NUREG/BR-0058, Revision 3, July 2000.
6. "Regulatory Analysis Technical Evaluation Handbook," NUREG/BR-0184, January 1997.
7. "Generic Cost Estimates," NUREG/CR-4627, Revision 2, February 1992.
8. "Decommissioning Criteria for Nuclear Facilities," 50 FR 5600, February 11, 1985.

***ATTACHMENT 3***  
***ENVIRONMENTAL ASSESSMENT***

## **ENVIRONMENTAL ASSESSMENT FINAL RULE – 10 CFR 50.83**

### **Release of Part of a Facility or Site for Unrestricted Use Before the NRC Approves the License Termination Plan**

#### **INTRODUCTION**

In accordance with 10 CFR Part 51 (Reference 1), this document presents the findings of NRC's environmental assessment of a rule to standardize the process for the release of a part of a nuclear power reactor facility or site for unrestricted use before NRC approval of the License termination Plan (LTP). This type of release is termed a "partial site release." The rule adds a new section to 10 CFR Part 50, separate from the decommissioning and license termination rules, that identifies the criteria and the regulatory framework to be used by licensees requesting approval of partial site releases. The rulemaking includes associated amendments to 10 CFR Part 2 and 10 CFR Part 20.

NRC's regulations for implementing Section 102(2) of the National Environmental Policy Act of 1969 (NEPA), as amended, are contained in Subpart A of 10 CFR Part 51. These regulations require that an environmental impact statement or an environmental assessment be prepared for all licensing and regulatory actions that are not classified as "categorical exclusions" in accordance with 10 CFR 51.22(c) and are not identified in 10 CFR 51.22(d) as other actions not requiring environmental review.

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

Prior to the implementation of this rulemaking, the holder of an operating license (i.e., the licensee) for a light-water power reactor is not required to seek or obtain NRC approval for a partial site release. The license termination criteria of 10 CFR 50.82 and 10 CFR Part 20, Subpart E, did not require a reactor licensee to demonstrate compliance with the radiological criteria for unrestricted use for a partial site release. Nor did the regulations require a licensee to submit information necessary for the staff to evaluate the adequacy of a licensee's partial site release. To address the regulatory gap in 10 CFR Parts 20 and 50, the staff believed that a rulemaking was needed to make it clear that the radiological criteria of 10 CFR Part 20, Subpart E, for unrestricted release (0.25 mSv/yr [25 mrem/yr] to the average member of the critical group and as low as reasonably achievable) apply to a partial site release. The rulemaking continues to ensure that any remaining residual radioactivity from licensed activities in parts of a site released for unrestricted use meets the radiological criteria for license termination.

The rule is narrowly focused on operating and decommissioning power reactors. Furthermore, the rule does not allow partial site release under restricted conditions (as restricted release is permitted for license termination in 10 CFR 20.1403).

In order for the staff to evaluate the adequacy of the licensee's plans for partial site release, the rule requires licensees to submit information necessary to demonstrate the following:

- The release complies with the radiological criteria for unrestricted use in

10 CFR 20.1402 (0.25 mSv/yr [25 mrem/yr] to the average member of the critical group and as low as reasonably achievable).

- The licensee will continue to comply with all other applicable regulatory requirements that may be affected by the release of property and changes to the licensed site boundary. This would include, for example, requirements in 10 CFR Parts 20, 50, 72, and 100.
- Records of property line changes to the licensed site and the radiological conditions of partial site releases are being maintained to ensure that the dose from residual material associated with these releases can be accounted for at the time of any subsequent partial releases and at the time of license termination.

The approval process for releasing property depends on the potential for residual radioactivity from plant operations present in the area to be released. For areas classified as impacted, and, therefore, having some reasonable potential for residual radioactivity, the licensee would submit a license amendment application with the licensee's demonstration of compliance with the radiological criteria for unrestricted use specified in 10 CFR Part 20, Subpart E, Section 1402 (0.25 mSv/yr [25 mrem/yr] to the average member of the critical group and as low as reasonably achievable). Regulatory guidance for performing this demonstration is contained in NUREG-1727, "NMSS Decommissioning Standard Review Plan" (Reference 2). For proposed release areas classified as *non-impacted* and, therefore, having no reasonable potential for residual radioactivity, and where a license amendment is not otherwise required or desired by the licensee, the NRC can approve the action by letter upon determining that the licensee has met the criteria of the rule.

A Part 50 or Part 72 license may contain a license condition or a technical specification describing the licensed site area in detail. Because a partial site release in this case would change the site as licensed, a license amendment application for the proposed partial site release would be required regardless of the amount of residual radioactivity present in the area to be released.

### **Need for the Action**

The objective of this rulemaking is to standardize the process for allowing a licensee to release part of its reactor facility or site for unrestricted use before receiving approval of its license termination plan (LTP). The rule ensures that residual radioactivity meets the radiological criteria for license termination even if parts of the site are released before a licensee submits its LTP.

The staff concluded that existing regulations did not address the issue of partial site releases before NRC approval of a licensee's LTP. The gap in the existing regulations could conceivably allow a licensee to adopt a piecemeal approach to reduce the size of its site and avoid applying the license termination rule release criteria when the licensee requests termination of its 10 CFR Part 50 license. Because several current reactor licensees have expressed interest in selling parts of their sites before they receive approval of their LTPs, the staff believed the issues should be resolved generically.

### **Environmental Impacts of the Action**

The partial site release rule applies only to Part 50 licensees of operating and decommissioning nuclear power reactors. It addresses two situations, depending on the potential for residual radioactivity present in the area proposed for release. First, for areas classified as impacted, and, therefore, having some reasonable potential for residual radioactivity, the licensee would submit a license amendment request with the licensee's demonstration of compliance with the radiological criteria for unrestricted use specified in 10 CFR Part 20, Subpart E, Section 1402. Second, for proposed release areas classified as *non-impacted* and, therefore, having no reasonable potential for residual radioactivity, and where a license amendment is not otherwise required or desired by the licensee, the NRC can approve the action by letter upon determining that the licensee has met the criteria of the rule.

The NRC prepared a "Generic Environmental Impact Statement (GEIS) in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities" (NUREG-1496, Reference 3), for 10 CFR Part 20, Subpart E. In that rulemaking, the Commission stated that the GEIS encompassed impacts expected to occur in most releases of a site for unrestricted use. The Commission concluded that the GEIS satisfied the obligations of NEPA for sites that meet the 0.25 mSv/yr [25 mrem/yr] criterion for unrestricted use. However, the Commission said it would still initiate an environmental assessment of any site for which a categorical exclusion did not apply to determine if the GEIS encompassed the range of environmental impacts expected at the site.

Under the partial site release rule, licensees requesting a partial site release are expected to address the environmental consequences of the proposed release of parts of their property. No environmental consequences would be expected for the release of areas in which there is no reasonable potential for residual radioactivity. The rule specifically requires that licensees address the impact of the planned action on effluent releases, the site environmental monitoring program, and the offsite dose calculation manual. NRC verification of these steps will be conducted via detailed technical review of licensee-submitted information and onsite NRC inspections, including confirmatory radiation surveys as warranted. In those instances involving license amendments, licensees would also be required to provide a supplement to the existing environmental report to address the planned release. This requirement is similar to that of 10 CFR 50.82 (a)9(ii)G, the license termination rule. For letter release requests, licensees are required to provide the reasons for concluding that the environmental impacts associated with the proposed release will not be greater than those estimated in previously issued environmental impact statements.

The changes incorporated in the rulemaking do not increase the probability or consequences of accidents, do not involve a significant increase in the amounts nor a significant change in the types of any effluents that may be released off site, and do not significantly increase occupational or public radiation exposures. Therefore, no significant radiological environmental impacts are associated with the changes. The changes do not involve non-radiological plant effluents and have no other environmental impact. Therefore, no significant non-radiological environmental impacts are associated with the rulemaking.

### Alternatives to the Action

As required by Section 102(2)(E) of the NEPA (42 U.S.C.A. 4332(2)(E)), the NRC has considered possible alternatives to the proposed action. The staff considered the following alternatives to the rulemaking:

Alternative 1: No action. If the NRC followed this alternative, rulemaking would not be pursued and the current situation would be maintained. The NRC would address proposals to release a part of a power reactor facility or site on a case-by-case basis. Under this alternative, NRC would evaluate each partial site release using the guidance in NRC Regulatory Issue Summary (RIS) 2000-19, "Partial Release of Reactor Site for Unrestricted Use Before NRC Approval of the License Termination Plan" (Reference 4). For the most part, the RIS guidance parallels the rule and requests information from licensees that propose a partial site release in order to facilitate NRC evaluation of the proposed action. However, the RIS does not require licensee action as would a regulation. Following this alternative would avoid expenditure of NRC resources on rulemaking. However, the lack of regulations providing a standardized process for requesting approval of a partial site release could result in the application of inconsistent or unnecessary standards to the related technical reviews and unnecessary expenditure of industry and NRC resources in determining appropriate standards and processes for each case.

An advantage of this alternative is that, following the guidance in RIS 2000-19, an environmental review would be included in those partial site release cases involving a license amendment request and in selected cases involving a licensee's letter request. Also, public notification provisions contained in RIS 2000-19 should help ensure that all environmental concerns related to a proposed release are considered.

A drawback of this alternative is that an adverse impact on public health and safety could result from partial site releases at reactor sites because of a lack of regulation specifically applying the radiological criteria for release of property for unrestricted use. Further, taking no action could result in the loss of information related to the radiological condition of released areas. This step would have a direct effect on the ultimate decommissioning of the site.

Alternative 1 is not a preferred option because it would not address the concern that continued regulation of partial site release on a case-by-case basis would be inconsistent and inefficient. The lack of a standardized process for partial site release could jeopardize the effectiveness of the ultimate decommissioning of a facility if the radiological standards of 10 CFR Part 20 were not properly applied. The current situation also could allow licensees to pursue partial site releases that circumvent the intent of the license termination rule by using a piecemeal approach to clearing property for unrestricted use. These health and safety considerations were an important factor in the NRC's determination that this option was not acceptable.

Alternative 2: Broad scope rulemaking: Revise 10 CFR Parts 2, 20, 30, 40, 50, 70, and 72 to address partial site releases at a variety of facility types. Following this alternative could improve overall efficiency by addressing partial releases of all types of facilities in a single, large effort. However, the short-term resource expenditures to expand the scope of rulemaking would be significant because of the larger number and the greater diversity of stakeholders involved. Also,

the different schedules required for the decommissioning of materials and reactor facilities could result in some differences in the requirements for partial site releases in any case.

This alternative could provide clear and consistent regulation of partial releases for all classes of licensees and could allow guidance developed for decommissioning and license termination to be used for partial site releases. This approach could help ensure that the radiological consequences associated with partial site releases at all licensed facilities do not present an undue risk to public health and safety. However, current regulations for materials licensees address partial site release to a limited extent so that some NRC review is involved. Thus, the regulatory gap, and its associated environmental impact being addressed by the rule for reactor licensees, is not as significant for materials licensees.

Alternative 2 is not a preferred option because it is not expected to provide the timely rulemaking necessary to address potential near-term partial release requests. Including other facility types in the rule would add many additional technical issues that are not concerns for power reactor sites. Partial site releases for materials licensees are addressed to a limited extent in other regulations (i.e., Parts 30, 40, 70, and 72). The rule will change the requirements for reactor sites but will not affect regulation of materials licensees. The impacts associated with license termination activities at a wide variety of sites that could be decommissioned were considered in the GEIS, NUREG-1496, and the rule is not expected to alter the conclusions in that study. In the future, the staff may consider changes to the regulations for materials licensees to make the requirements consistent with the rule for reactor licensees.

In summary, the rulemaking does prevent the potentially adverse environmental impact of the first option - that a partial site release could hinder the eventual safe decommissioning of a reactor site. The rulemaking requires NRC review of proposed partial site releases, applying the license termination radiological release criteria. The no-action alternative would not ensure NRC review nor the use of specific release criteria, thus presenting the potential for adverse environmental impacts.

The environmental impacts under the proposed action and the second alternative at reactor sites are identical because both options use the same radiological criteria for partial site release. Pursuing a broad-based rulemaking for all licensees would add technical complexity to the rulemaking and significantly delay implementation of the proposed rule for reactor sites. This step would allow the continued potential for adverse environmental outcomes at reactor sites pursuing partial site releases until the rulemaking is implemented. Partial site releases of non-reactor sites were considered in the existing license termination regulations, but a regulatory gap exists for reactor facilities. The opportunity exists for NRC review of proposed partial releases of non-reactor sites. Thus, the regulatory gap that exists for reactor sites is not an issue for non-reactor sites, and there is much less potential of an adverse environmental result compared to the existing situation for reactor sites. In short, pursuing the rule addresses a potential for significant environmental impact at reactor sites. Similar adverse environmental consequences are not expected for non-reactor licensees under existing regulations.

### **Agencies and Persons Consulted**

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

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

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

### **References**

1. Code of Federal Regulations, Title 10, Chapter I, Parts 2, 20, 30, 40, 50, 51, 70, and 72.
2. NUREG-1727, "NMSS Decommissioning Standard Review Plan," September 2000.
3. "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities," NUREG-1496, Volume 1, July 1997.
4. NRC Regulatory Issue Summary 2000-19, "Partial Release of Reactor Site for Unrestricted Use Before NRC Approval of the License Termination Plan," October 24, 2000.





Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420



**DOCKET NUMBER**  
**FPL PROPOSED RULE** **RR 220+50**  
**(66FR 46230)** L-2001-263  
November 16, 2001

DOCKETED  
USNRC

November 20, 2001 (11:36AM)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Ms. Annette Vietti-Cook  
Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
Attn: Rulemakings and Adjudications Staff

Subject: Florida Power & Light Company Comments  
Releasing Part of a Power Reactor Site or Facility for Unrestricted Use  
Before the NRC Approves the License Termination Plan  
66 Fed. Reg. 46230 (Sept. 4, 2001)

Dear Ms. Vietti-Cook:

Florida Power & Light Company (FPL), the owner and operator of the St. Lucie Nuclear Plant, Units 1 and 2, and the Turkey Point Nuclear Plant, Units 3 and 4, hereby submits the following comments in support of the above-referenced notice of proposed rulemaking.

In principle, FPL supports the proposed rulemaking because it would allow licensees the option to request the release of portions of the licensed site for unrestricted use, prior to the decommissioning process. The rule will benefit licensees that may be considering more productive or efficient utilization of their currently licensed property, even if they plan to decommission an adjacent nuclear power reactor facility several years into the future. This rule can also benefit facilities where the licensee owns, leases or controls very large tracts of contiguous property some of which is not connected to receiving, possessing or using licensed material, but is currently included within the facility's current site boundary as defined in their license. FPL supports the provisions of the proposed rule that are intended to allow the release of non-impacted areas without requiring a license amendment. However, FPL does not believe there is a reason for the Commission to limit to the size or number of partial site releases and FPL does not agree with the assumption that once a License Termination Plan (LTP) has been approved there is no longer any need for a separate regulatory mechanism for partial site releases. A significant length of time may pass between approval of the LTP and license termination. Licensees should retain the opportunity to pursue a partial site release even after the LTP has been approved without the need to reopen the entire LTP to a potential hearing process.

Proposed 10CFR50.75(g) in conjunction with 10CFR50.83, utilizes site boundary to define the property that is subject to the rule and references 10CFR20 Subpart E as the radiological release criteria for a partial site release. The intent of the proposed rule would be to allow licensees to release portions of their site for unrestricted use, including the sale of such property. However, there is a conflict between the current definition of "site boundary" in 10CFR20.1003 and the intent of this proposed rule that could preclude its implementation. Since site boundary is defined based on ownership, lease or control of the property, a licensee may be required to seek a regulatory exemption to redefine the site boundary before the property could be sold.

an FPL Group company

Template = SECY-067

SECY-02



**YANKEE ATOMIC ELECTRIC COMPANY**  
19 Midstate Drive, Auburn, Massachusetts 01501

**DOCKET NUMBER**  
**PROPOSED RULE** **FR 2,20+50**  
**(66FR46230)**



**CONNECTICUT YANKEE ATOMIC POWER COMPANY**  
362 Injun Hollow Road, East Hampton, Connecticut 06424-3099

DOCKETED  
USNRC

November 20, 2001 (11:36AM)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

November 16, 2001  
BYR 01-074  
CY 01-192

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attention: Rulemakings and Adjudications Staff

Subject: Comments on the Proposed Rule – Releasing Part of Power  
Reactor Site or Facility for Unrestricted Use Before the NRC  
Approves the License Termination Plan (66 FR 46,230 –  
September 4, 2001)

Dear Sir:

Yankee Atomic Electric Company (YAEC) and Connecticut Yankee Atomic Power Company (CYAPCO) appreciate the opportunity to provide comments to the U.S. Nuclear Regulatory Commission (NRC) in response to the subject notice. This proposed rule will provide a real value to both the reactor licensee and the host community by allowing power reactors to release portions of their sites prior to the approval of a license termination plan. As such, we support this needed regulatory action.

The following discussion provides our comments:

In the proposed rulemaking, the NRC has departed from the process described in SECY-00-0023, dated February 2, 2000. We believe, however, that the proposed regulation should preserve, as an alternative, the ability to release an impacted area if it can be demonstrated that there is no residual radioactivity distinguishable from the background present. The release process should follow the same process as that for a non-impacted area – approved via letter as opposed to an amendment. The burden in this alternative is to develop and present strong reference background radiation data to support and defend the validity of its use. We feel that the appropriate criteria for indistinguishability from background does exist. Potential criteria corresponding to the current free release criteria could be used by licensees. The added benefit in the use of this alternative would be to eliminate the burdensome nature of the proposed regulation relative to releasing areas that contain no measurable radioactivity.

Template = SECY-067

SECY-02

The regulation should also recognize licensee use of a NRC approved process prior to the rulemaking, such as the processes described in SECY-00-0023 and RIS 2000-19. If final status survey information has been submitted for NRC review for partial release of an area prior to the rulemaking becoming effective, the licensee should be allowed to proceed in accordance with the NRC approved process.

Should you have any questions regarding our comments, please do not hesitate to contact either Mr. Gerry vanNoordennen, CYAPCO Regulatory Affairs Manager at (860) 267-3938 or myself at (978) 568-2302.

Sincerely,

YANKEE ATOMIC ELECTRIC COMPANY

A handwritten signature in cursive script that reads "J. A. Kay". The signature is written in black ink and is positioned above a horizontal line.

James A. Kay  
Manager of Regulatory Affairs

DOCKETED  
USNRC

November 20, 2001 (2:29PM)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFFDOCKET NUMBER  
PROPOSED RULE PR 2,20+50  
(66 FR 46230)James W. Davis  
DIRECTOR, OPERATIONS  
NUCLEAR GENERATION DIVISION

3

November 19, 2000

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001**ATTENTION:** Rulemakings and Adjudication's Staff**SUBJECT:** Industry Comments in Support of Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan."

The Nuclear Energy Institute (NEI)<sup>1</sup> appreciates the opportunity to provide comments on behalf of the nuclear industry on the proposed rule for partial site release. As proposed, the rulemaking would allow power reactors to release portions of their sites prior to the submittal of a license termination plan. Recent industry experience with decommissioning power reactors indicates that this rule will provide real value to the reactor licensee and the host community. In addition, operating reactor facilities and their host communities will have the option to effectively use property, which does not directly support plant operations. Industry supports this needed regulatory action.

The intent of the proposed rule is clear. It appropriately establishes the radiological release criteria for unrestricted use found in 10 CFR 20 Subpart E as the criteria for a partial site release. The proposed rule also makes it clear that the entire site as defined in the original (or amended) license is subject to the License Termination Rule (LTR).

However, a conflict between the definition of "site boundary" in 10 CFR 20.1003 and the stated intent of the proposed rule could be interpreted in a way that would preclude the implementation of the rule. A literal interpretation of the 10 CFR 20.1003 definition of "site boundary" is in conflict with existing decommissioning guidance<sup>2</sup> NUREG-1221, Decommissioning Criteria for Nuclear Facilities, G.22, "Definition of Site" (1988); NRC Regulatory Issue Summary 2000-19, October 24, 2000; and 66 FR 46230 (2001)

<sup>1</sup> NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including regulatory aspects of generic operational and technical issues. NEI members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

<sup>2</sup> NUREG-1221, Decommissioning Criteria for Nuclear Facilities, G.22, "Definition of Site" (1988); NRC Regulatory Issue Summary 2000-19, October 24, 2000; and 66 FR 46230 (2001)

Template = SECY-067

SECY-02

Secretary  
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Page 2

2, and the NRC guidance<sup>3</sup> historically used by most reactor licensees when they applied for their construction permits or operating licenses. This guidance defined the "site" as the contiguous real estate where licensees have the legal right to control access **for the purposes of limiting public dose** (emphasis added). Finally, the definition of "site boundary" in 10 CFR 20.1003 is a conflict for those Part 50 licensees who have their site defined in their license and who own, lease, or otherwise control land beyond that defined line.

It is clear that the NRC always intended to regulate the "licensed activities" associated with site. The fact that a licensee may own or acquire extensive contiguous land for purposes completely unrelated to the licensed activity should not subject those properties to NRC regulatory requirements. In practical terms the LTR should apply to all properties directly associated with the use of licensed materials. Included are those properties used for the purpose of receiving, possessing, or using licensed materials

NEI recommends that the NRC resolve this conflict in the site boundary definition. Several alternatives are available and two are identified below: A direct approach is to amend the 10 CFR 20.1003 definition of "site boundary" to read:

Site boundary means that land or property contiguous with the facility and identified by the licensee, within which the licensee has the legal right to control access.

As an alternative, 10 CFR 20 Subpart E could be revised to apply to the restricted area as defined in 10 CFR 20.1003, as opposed to the site boundary. Unlike the site boundary definition, the restricted area contains all site properties associated with receiving, possessing, or using licensed materials. In addition, the restricted area definition includes lands legally controlled for the purposes of limiting public dose.

Language in the section-by section analysis of the proposed rule attempt to clarify the relationship between radiation exposure limits associated with 10 CFR 20 Subpart D, Subpart E, and the EPA 40 CFR 190 requirements referenced in 10 CFR 20.1301(d). However, it inappropriately establishes a new policy position as written. Exposures due to residual radioactivity associated with a terminated 10 CFR Part 50 license are outside the scope of EPA 40 CFR 190. If necessary, this material would be regulated by EPA under Superfund authority. It is therefore not necessary to reduce the 10 CFR 20 Subpart E standard to account for additional exposures that originate from the operation of nearby uranium fuel cycle facilities. NEI requests that this regulatory relationship be clarified in the final rule.

The proposed rule suggests that specific guidance is under development and will be available prior to the final rule. This guidance is designed to assist the licensees in identifying and accounting for any potential dose contribution from a partial site release

<sup>3</sup> See NUREG-75/094, § 2.1.12 (fn.) (1975); NUREG-0099, § 2.1.12 (fn.) (1976)

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November 19, 2001  
Page 3

of impacted lands on the final license termination. This guidance is needed before the rule is issued to ensure that the partial site release process and the ultimate license termination can be accomplished practically as envisioned. NEI is interested in reviewing and commenting on this guidance as it develops.

General comments and specific answers to the seven questions posed in the proposed rule are provided on the enclosure to this letter.

Once again, NEI appreciates the opportunity to provide these comments in support of the proposed rule. If you have questions concerning the enclosed comments, please contact me at (202) 739-8105 or Paul Genoa at (202) 739-8034.

Sincerely,

James W. Davis

Enclosure

**Industry Comments in Support of Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan"**

**General Comments:**

NEI agrees with your assessment that: "...many material sites are more complex from a decommissioning perspective than reactor sites."

NEI agrees with your assessment that: "...a partial site release leaving residual radioactivity at a site that meets the release criteria for unrestricted use of 10 CFR 20.1402 is not considered a disposal."

NEI disagrees with the assumption that once an LTP is approved: "...there is no longer any need for a separate regulatory mechanism for partial site releases." Many years may pass between the LTP approval and license termination. A licensee should have the opportunity to pursue a partial site release post LTP approval without opening the entire LTP content to a hearing process.

NEI agrees with your assessment that: "...licensees are already maintaining property records in order to comply with the LTR at time of license termination..." however, the NRC should clarify the rule to acknowledge that reactor licensees maintain these records, along with those required under 10 CFR 50.75(g) in a distributed fashion. They do not reside in a specific file folder, but are maintained within the overall record management system.

**Specific Comments:**

The following comments or recommendations pertain to specific provisions within the proposed rule change to 10CFR50.

- Section 50.2: It is recommended that the definitions for "Historical site assessment" and for "Impacted areas" and "Non-impacted areas" should refer to the radioactive material or radioactivity from licensed activities.
- Section 50.75(g)(4): The language contained in this section does not blend with existing Section 50.75(g) wording, which states "Information the Commission considers important to decommissioning consist of..." and "Licensees shall maintain property records containing the following information:" NEI recommends the words "Licensees shall maintain" be removed from Section 50.75(g)(4).
- Section 50.75(g)(4)(iv): Recommend changing "disposition" the first time it appears to "release and final disposition" and change "disposition" to "release" the second time it appears.

- Section 50.82(a)(9)(ii)(H): Recommend adding the word unrestricted as indicated “...release for unrestricted use ...,”
- 50.82(11)(ii): Recommended change, “The final radiation survey and associated documentation demonstrate that the facility and site, including any parts released for unrestricted use before approval of the license termination plan, ~~are suitable for release in accordance with the~~ have met the applicable criteria for release for decommissioning in 10 CFR part 20, subpart E.”
- Section 50.83 (a)(1)(i): Recommended change, “The dose to individual members of the public from the portion of the facility or site ~~remaining under the license~~ that has not been released for unrestricted use does not ...”
- Sections 50.83(c) and 50.83(e) should include references to the satisfaction of the public meeting requirements similar to those specified in 50.83(f).
- Regarding release of impacted areas under the proposed partial release rule, 10 CFR 50.59 will not apply, since a license amendment would be required. Therefore, the wording in proposed section 10 CFR 50.83 (d)(1) should be modified to delete the reference to complete a 10 CFR 50.59 evaluation.



### Answers to NRC Questions

The following section pertains to the questions raised by NRC under Issues for Public Comment.

1. Are there rulemaking alternatives to this proposed rule that were not considered in the regulatory analysis for this proposed rule?

Yes. Some licensees have expressed a desire to have the option to use the license amendment approach even for non-impacted lands to provide additional assurance to future owners. This option should be included in the proposed rule.

2. Are the proposed definitions in 50.2 clear?

No. NEI believes that further clarification is needed and recommends that the definitions in proposed Section 50.2 be changed to reflect that the radioactive material or radioactivity be from licensed activities.

3. Is public involvement adequately considered?

Yes.

4. Should the license amendment process be required for all partial site release approvals, regardless of whether the site has been classified as non-impacted?

No. Adding this as a requirement is not justified for non-impacted partial site releases. However, some licensees have expressed a desire to have the option to use the license amendment approach even for non-impacted lands. NEI recommends that this approach be offered option.

5. Does the proposed rule make it adequately clear that when performing partial site releases and when releasing the entire site at license termination, licensees must consider potential dose contributions from previous partial releases in demonstrating compliance with the radiological release criteria?

Yes. However the promised guidance will help identify how this can best be accomplished.

6. Is there reason to limit the size or number of partial site releases?

No. As long as the final license termination addresses the entire site, the intent of the license termination rule is met.

7. Are there other potential impacts on continued operation or decommissioning activities as a result of partial site releases that should specifically be considered in the rule?

Yes. NEI does not agree with the assumption that once a License Termination Plan (LTP) has been approved there is no longer any need for a separate regulatory

mechanism for partial site releases. A significant length of time may pass between approval of the LTP and license termination. As stated in the general comments, NEI believes that licensees should retain the opportunity to pursue a partial site release even after the LTP has been approved without the need to reopen the entire LTP to a potential hearing process.

DOCKET NUMBER  
PROPOSED RULE PR 2,20+50  
(66FR 46230)

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USNRC

4

2001 NOV 20 PM 2: 32

OFFICE OF THE SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

November 19, 2001

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attention: Rulemaking and Adjudications Staff

RE: 10CFR Parts 2, 20, and 50; Ref. 66FR46230, September 4, 2001, Proposed Rule

The Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Workgroup has found an inconsistency with MARSSIM in the definitions of impacted and non-impacted areas in the proposed rule entitled "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan."

In section 10CFR50.2 "Definitions," the definitions state:

"Impacted areas mean the areas with some reasonable potential for residual radioactivity in excess of natural background or fallout levels."

"Non-impacted areas mean the areas with no reasonable potential for residual radioactivity in excess of natural background or fallout levels."

These definitions are inconsistent with MARSSIM. The MARSSIM Workgroup is concerned these proposed inconsistencies diverge from the multi-agency consensus of MARSSIM. Promulgation of divergence from MARSSIM in a rule could lead to the return to the multiple requirements for site release by the different agencies.

The MARSSIM Workgroup offers the following multi-agency consensus replacement text for the definitions of impacted and non-impacted areas:

Impacted Area: (Refer to MARSSIM page GL-11) - "Any area this is not classified as non-impacted. Areas with a possibility of containing residual radioactivity in excess of natural background or fallout levels."

Non-Impacted Area: (Refer to MARSSIM page GL-14) - "Areas where there is no reasonable possibility (extremely low probability) of residual contamination. Non-impacted areas are typically located off-site and may be used as background

Template-SECY-067

SECY-02

*reference areas."*

The MARSSIM Workgroup does not view the modifications to the definitions of impacted and non-impacted areas in the proposed rule as necessary or appropriate and recommends the definitions be consistent with the MARSSIM text as provided above.

Sincerely,

The MARSSIM Workgroup

Commander Colleen F. Petullo\*  
MARSSIM Workgroup Chairperson

Ramachandra K. Bhat  
U.S. Air Force

Harold T. Peterson, Jr.  
U.S. Department of Energy

David P. Alberth  
U.S. Army

Kathryn A. Klawiter  
U.S. Environmental Protection Agency

Commander Steven W. Doremus  
U.S. Navy

Robert A. Meck  
U.S. Nuclear Regulatory Commission

\* U.S. Public Health Service *detailed* to U.S. Environmental Protection Agency

DOCKETED  
USNRC

5

**DOCKET NUMBER**  
**PROPOSED RULE** PR 2, 20+50  
 (66FR 46230)

November 20, 2001 (3:14PM)  
 OFFICE OF SECRETARY  
 RULEMAKINGS AND  
 ADJUDICATIONS STAFF

ATTACHMENT TO MN-01-045

**Maine Yankee: Comments on Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan."**

November 19, 2001

MN-01-045

RA-01-172

**FILED ELECTRONICALLY  
 TO NRC RULEMAKINGS**

SECRETARY  
 UNITED STATES NUCLEAR REGULATORY COMMISSION  
 Attention: Rulemakings and Adjudications Staff  
 Washington, DC 20555-0001

Reference: (a) License No. DPR-36 (Docket No. 50-309)  
 (b) NRC Proposed Rule "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan," 66FR 46230 - 46239, dated September 4, 2001

Subject: Maine Yankee Comments on NRC Proposed Rule "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan"

Maine Yankee (MY) joins with the Nuclear Energy Institute (NEI) in encouraging the development of this rulemaking in that 10 CFR 50 does not currently address the possibility of the partial release of licensed site lands. It is clearly MY's experience that the decommissioning strategy may well call for an appropriate, sequenced program for the survey, evaluation, and release of some portion of the site to meet numerous objectives in the decommissioning project, including the potential for pursuing beneficial alternate or re-use of certain site lands to address potential public use or commercial interests prior to the approval of the license termination plan and completion of site decommissioning. The proposed rulemaking offers that flexibility to the licensee and provides a regulatory process and framework in which the licensee, state and local regulatory agencies, community organizations, and public interest groups can participate.

Attached are some specific comments on the proposed rule. We appreciate the opportunity to provide comments. If you have any questions with regard to our comments, please contact me.

Sincerely,

Original Signed by Thomas L. Williamson

Thomas L. Williamson, Director  
 Nuclear Safety and Regulatory Affairs

c: Mr. M. K. Webb, NRR Project Manager  
 Mr. C. L. Pittiglio, NRC NMSS Project Manager, Decommissioning

Template = SECY-067

SECY-02

**ATTACHMENT TO MN-01-045****Maine Yankee: Comments on Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan."**

Mr. R. Ragland, NRC Region I  
Mr. H. J. Miller, NRC Regional Administrator, Region I  
Mr. P. J. Dostie, State of Maine, Division of Health Engineering

Maine Yankee offers the following comments on the subject proposed rule.

1. **Partial Release of Areas Classified as Non-Impacted.** MY agrees that the licensee should have the option for submitting a non-license amendment request for partial release of the licensed site for those areas that have been classified as non-impacted. However, some licensees based on any number of considerations, including stakeholder interests, require that a license amendment process be applied. The proposed rulemaking should be amended to provide for this option.
2. **Clarification of Regulations in the Matter of the "Site" Subject to 10 CFR 50.82 and 10 CFR 20 Subpart E**
  - a. The rulemaking's "Supplementary Information" discusses a possible misinterpretation and unintended use of the definition of site boundary in 10 CFR 20.1003 in which a "site" subject to 10 CFR 50.82 and 10 CFR Subpart E could be "changed by selling the property."<sup>1</sup> The NRC should consider and clarify as necessary an additional, possible misinterpretation and misapplication of this site boundary definition, as described below.
  - b. While it is clear that the NRC intends and states that the entire site subject to the license termination rule is that defined in the original license,<sup>2</sup> the definition of 10 CFR 20.1003 could be interpreted in a way that not fully consistent with this intention. In this definition the site boundary is described in terms of the limit of ownership, lease, or control. Without consideration of context and application, this definition could be used to argue that the site boundary extends, therefore, to that property that is owned by the licensee but not included in the site as defined in the original (or amended license). Since many licensees own property that would not and should not be considered as part of the licensed site, this definition could lead to an inappropriate conclusion regarding the application of license termination requirements and the requirements associated with the partial release of "site" lands from the facility license.
  - c. From a historical standpoint, it is pointed out that when most licensees were applying for construction permits or operating licenses, NRC guidance defined the

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<sup>1</sup> 66 FR 46230 (2001).

<sup>2</sup> NUREG-1221, Decommissioning Criteria for Nuclear Facilities, G.22, "Definition of Site" (1988); NRC Regulatory Issue Summary 2000-19, October 24, 2000; and 66 FR 46230 (2001).

**ATTACHMENT TO MN-01-045****Maine Yankee: Comments on Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan."**

"site" as the contiguous real estate where licenses have the legal right to control access for the purposes of limiting public dose.<sup>3</sup> In 1991, the current definition of site boundary in 10 CFR 20.1003 was promulgated. It appears that the primary intent (and context) of this definition was to support the concept of controlled area since its sole use is in the Part 20 definition for "controlled area." This appears to be consistent with the historical use of "site" since the licensee must have the ability to limit and control access at any time "for any reason."<sup>4</sup> However, as stated above, the 10 CFR 20.1003 definition of site boundary could be inappropriately expanded to any property owned by the licensee which is not part of the site as defined in the facility license.

- d. The proposed rulemaking's "Section-by-Section" Analysis regarding the consideration of effluents or direct radiation should be clarified regarding the "area" that is subject to the demonstration of compliance with the radiological release criteria. The "Section-by-Section" analysis related to 10 CFR 20 Subpart E properly discusses that the standard for unrestricted release "does not include dose from effluents or direct radiation from continuing operations."<sup>5</sup> It should be recognized that there may be areas that are not part of the licensed site as defined in the original license which have been subject to licensed effluent releases, for which all monitoring and reporting regulations have been met, even though those areas may, in fact, be owned by the licensee. The rulemaking should be clarified to indicate that it is not the intent of this rulemaking (or the license termination rule) to require additional dose assessments for areas that may be owned but are not part of the licensed site. To require such additional consideration of compliance with release criteria would erode public confidence in the already established regulations which govern off-site effluent release dose for both operating facilities and those undergoing decommissioning.
- e. It is recommended that the NRC review the use of the term "site" in 10 CFR 50.82 and 10 CFR 20 Subpart E and determine what appropriate clarifications are needed to insure that Commission intent, namely that the license termination rule criteria apply to the entire site as defined in the original license. As note above there exists the potential for a misinterpretation of the current framework of definitions. In summary: (1) 10 CFR 50 uses the term "site" but does not define "site." In that 10 CFR 50.82 refers to 10 CFR 20 Subpart E release,<sup>6</sup> it would be logical to use 10 CFR 20 as the source of the definition of site. (2) 10 CFR Subpart E uses the term "site" as it applies to decommissioning but does not

<sup>3</sup> See NUREG-75/094, § 2.1.12 (fn.) (1975); NUREG-0099, § 2.1.12 (fn.) (1976).

<sup>4</sup> 10 CFR 20.1003, "Controlled Area."

<sup>5</sup> 66 FR 46233.

<sup>6</sup> 10 CFR 50.82 (a)(11)(ii)

**ATTACHMENT TO MN-01-045****Maine Yankee: Comments on Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan."**

define or further describe "site." (3) 10 CFR 20.1003 offers the definition of "site boundary" in terms of the limits of ownership, lease, or control but could be subject to the misinterpretation of defining the site as any area that is owned. This is clearly not the intent of the proposed rulemaking or more broadly, the license termination rule. The proposed rulemaking should make it clear that the site and area subject to the license termination release criteria is that area which is included in the entire site as defined in the original license.

**3. Finality in the Determination of Compliance with Release Criteria**

- a. When releasing a portion of the site for unrestricted use, the licensees and subsequent parties which may come to use or own the land must have substantial confidence that the land has been properly released and will not come under future jeopardy of cost or defamation for unjustifiable reasons. The proposed rulemaking at 10 CFR 20.1401 includes the opportunity for the Commission to require additional cleanup only if a determination has been made "the criteria of this subpart were not met and residual radioactivity remaining at the site could result in significant threat public health and safety."<sup>7</sup> MY considers this criteria to be an important addition providing for adequate protection of the public if the need for additional cleanup has been identified, but at the same time offering a standard that must be met to insure that only clear and substantiated conditions exists that would warrant such actions.
- b. In view of the importance of "finality" discussed above, the NRC should consider rewording the language proposed for 50.82(a)(11). The current language "including any parts released for use before approval of the license termination plan" might force, a licensee to perform remediation or conduct surveys on land which has been previously released for use when the criteria of 10 CFR 20.1401(c) would not otherwise apply. It is clear from the statements of consideration that the NRC does not anticipate further surveys of previously released area,<sup>8</sup> but rather is seeking to account for, in the LTP, any possible dose contributions associated with previously released areas. It is suggested that the NRC rephrase the language proposed for 50.82(a)(11) as follows:

"(ii) The final radiation survey and associated documentation demonstrate that the facility and site, including any dose contributions associated with

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<sup>7</sup> 66 FR 46237, Proposed Rulemaking at § 20.1402 (c)

<sup>8</sup> 66 FR 46230, Background



**ATTACHMENT TO MN-01-045**  
**Maine Yankee: Comments on Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan."**

parts released for use before approval of the license termination plan..."

**ATTACHMENT TO MN-01-045****Maine Yankee: Comments on Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan."****4. Combining 10 CFR Part 20 Subpart E with Subpart D**

The proposed rule includes a discussion in the Statement of Consideration with respect to the combined application of 10 CFR Part 20 Subpart E and Subpart D when releasing part of a site for unrestricted use.<sup>9</sup> The statements are made without any corresponding proposed rule change. These statements constitute new positions by the NRC which would pose significant impacts and costs to licensees. The statements appear to treat land containing residual radioactivity as an effluent which also needs to be constrained by Subpart D. In earlier statements, the NRC affirmed that residual radioactivity left on land meeting release criterion does not constitute disposal. Similarly, it does not constitute an effluent. Subpart D and E were promulgated with different purposes and methods and should be kept separate.

NRC states "If residual radioactivity exists in the area to be released for unrestricted use, the dose caused by the release must be considered along with that from the licensee's facility, as well as, for the case of the EPA's standard incorporated in 20.1301(d), that from any other uranium fuel cycle operation in the area, for example a facility licensed under 10 CFR part 72, to determine compliance with the above standards." The NRC goes on to say that such land may have to meet a standard lower than the radiological criteria of Subpart E because the combined dose must meet the public dose limits and standards. If this interpretation were to hold it would have significant impact not only to licensees considering partial site release but also to licensees currently proceeding to terminate their Part 50 licenses with an onsite Part 72 ISFSI. This "new position" is clearly not expressed in licensing actions already issued by the NRC.

Once a portion of the site is released it is no longer meets the definitions of "uranium fuel cycle operation." Furthermore, the existence of other sources of exposure to the critical group is already accounted for in the construction of the 25 mrem radiological criteria for license termination. The NRC should reconsider this new position or perform a backfit analysis pursuant to 10 CFR 50.109.

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<sup>9</sup> 66 FR 46233 Section by Section Analysis for 10 CFR Part 20, Subpart D...

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OFFICE OF THE SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

From: "McBaugh, Debra" <Debra.McBaugh@DOH.WA.GOV>  
To: "wmr@nrc.gov" <wmr@nrc.gov>  
Date: 11/13/01 8:24PM  
Subject: Comments on Releasing Part of a Reactor for Unrestricted Use.....

Dear Mr. Ripley:

Comments on Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan:

Washington State only has one reactor located on federal DOE property so this proposal does not apply to us. Nonetheless, we took the time to review it. We have no substantive comments but wish to send our support for the concept. We recognize the lack of regulation covering this issue and agree regulation would assure that when a site is fully released, all of the site, both past and present, would meet the current License Termination criteria. This would make it much easier for states since they then would be responsible for the use of this land.

We appreciate the opportunity to comment on this.

Sincerely,

Debra McBaugh, Head, Environmental Radiation  
Susan May, Head, Nuclear Safety

Division of Radiation Protection, Washington State Department of Health

DOCKET NUMBER  
PROPOSED RULE ~~PR 2,20-50~~  
(66 FR 46230)

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Vaw,  
EMAIL received  
re: 66 FR 46230  
Proposed Rule  
— Ripley X-1112

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Template=SECY-067

SECY-02

PROPOSED RULE <sup>PR</sup> 2,20+50  
(66 FR 46230)DOCKETED  
USNRC

⑦

**From:** "Edward Wilds" <edward.wilds@po.state.ct.us>  
**To:** <wmr@nrc.gov>  
**Date:** 11/23/01 1:31PM  
**Subject:** Partial Site Release Comments

November 26, 2001 (12:03PM)  
OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

The Connecticut Department of Environmental Protection Division of Radiation wishes to submit the following comments regarding the Proposed Rule on Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan.

#### Issues for Public Comment

#### #3 - Is public involvement adequately considered?

No. There is no mechanism described in the proposed rule that addresses how or if stakeholders can challenge the "non-impacted designation" by a licensee. Though the proposed rule states that it provides for public participation through a public meeting, a public meeting to tell stakeholders of NRC decisions is not a participatory process. It gives no right of intervention, no right of appeal, and no right of a meaningful review. How does a public meeting address a material dispute in fact? NRC is not bound to consider any information brought forward during the public meeting. At the very least a mandatory public hearing is needed.

#### #5 - Does the proposed rule make it adequately clear that when performing partial site releases and when releasing the entire site at license termination, licensees must consider potential dose contributions from previous partial releases in demonstrating compliance with the radiological release criteria?

No. How will the situation be address if contamination is found in the future that can be shown to be a result the licensee's activities in areas that were designated non-impacted at the time of partial site release, is above the release criteria set by the LTP, or the property transferred to another entity? What rights would a potential purchaser have against the licensee, if after the purchase contamination if found? The rule seems to address only the situation where a licensee maintains ownership and control of the property.

The proposal states that an amendment to 10 CFR 50.82(a)(9)(ii) would require that the final radiation survey and associated LTP documentation, demonstrating that the site is suitable for release in accordance with the criteria in 10 CFR Part 20, Subpart E, include any parts released for use before approval of the LTP. How would the NRC require cleanup of areas released under partial site release if this area is what causes non-compliance with the dose criteria? How is this situation handled if it has been transferred to another entity? What rights would a potential purchaser have against the licensee, if after the purchase contamination if found?

#### #7 - Are there other potential impacts on continued operations or decommissioning activities as a result of partial site releases that should specifically be considered in the rule?

Yes. The impact of future operation/use of the area released under partial site release must consider potential threats to the storage of spent nuclear fuel or operation of the NPP prior to allowing control of the PSR area being transferred to a non-licensee. A situation exists in Connecticut where an area is proposed for partial site release with the intent to sell the property for development of a gas fired electrical generating plant in close proximity to spent fuel storage. No safety analysis of this proposal has been performed and how future threats to the nuclear fuel will be handled has not been addressed. The assumption that placing requirements on the existing licensee after threats are identified as a result of activities on PSR area is not an acceptable mechanism of protecting public health and safety.

Thank you for considering the Division of Radiation's comments regarding the Partial Site Release Proposed Rule.

Dr. Edward L. Wilds, Jr.

Template = SECY-067

SECY-02

\*\*\*\*\*  
Edward L. Wilds, Jr., Ph.D.  
Director, Division of Radiation  
Bureau of Air Management  
Department of Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127  
Ph: 860-424-3029  
Fax: 860-424-4065



DOCKET NUMBER  
PROPOSED RULE ~~FR 2729-50~~  
(66FR 46230)

A Edward Scherer  
Manager of Nuclear  
Oversight and Regulatory Affairs

8

November 20, 2001

DOCKETED  
USNRC

November 26, 2001 (11:47AM)

The Secretary of Commission  
U.S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Subject: **Comments on Proposed Rule, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan" (66 FR 46230)**

Attention: Rulemakings and Adjudications Staff

Southern California Edison offers the following comments on the subject rulemaking. We fully concur with the comments tendered by the Nuclear Energy Institute on behalf of the industry regarding this rulemaking. In addition, we offer the following comments.

We note that in both cases (partial site release without a license termination plan, or license termination for the entire site under existing rules) residual radioactivity may remain as long as the exposure criterion of 10 CFR 20 Subpart E is satisfied. Prior to license termination, this same residual radioactivity is treated as licensed material – regardless of how little the amount, concentration, or dose significance – and can only be disposed of by transport to a licensed radwaste disposal facility. This double standard poses an incentive to retain radioactive material onsite to be later abandoned in order to avoid potentially excessive costs for radwaste disposal, while creating a longer term risk for additional site cleanup required by other regulatory authority or court of law.

We note that the US Nuclear Regulatory Commission (NRC) is seeking to resolve this discrepancy through study by the National Academy of Sciences and further agency deliberation, a process that may take several years. Prolonged delay contributes to the erosion in public understanding and confidence in government policy as well as the lack of finality mentioned above for licensees. Public policy is needed to define the quantitative dose and radionuclide characteristics that have no discernible public health consequences.

P. O. Box 128  
San Clemente, CA 92674-0128  
949-368-7501  
Fax 949-368-6085

Template = SECY-067

SECY-02

As the situation now stands, the NRC should recognize that post-license termination requirements imposed by other federal, state or local agencies can prevent the actual release of a site for unrestricted use – in contravention to the purposes of the license termination rules. NRC should, therefore, act to assert its authority in matters of radiation protection and management of radioactive materials. This will require definitive clearance standards for materials that establish allowable quantities and concentrations of radionuclides that are less than regulatory concern. Such standards can be created which are fully protective of public health and safety and are in the public interest.

Sincerely,

A handwritten signature in black ink, appearing to be "A. J. ...", written in a cursive style.

William T. O'Connor, Jr.  
Vice President, Nuclear Generation

9

DOCKETED  
USNRC

Fermi 2  
6400 North Dixie Hwy., Newport, Michigan 48166  
Tel: 734.586.6201 Fax: 734.586.4172

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OFFICE OF THE SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

**Detroit Edison**



A DTE Energy Company

DOCKET NUMBER  
PROPOSED RULE ~~PR 20250~~  
(66FR 46230)

November 05, 2001  
NRC-01-0078

Secretary, U.S. Nuclear Regulatory Commission  
Attn: Rulemakings and Adjudications Staff  
Washington, DC 20555-0001

- Reference:
- 1.) Enrico Fermi Atomic Power Plant, Unit 1  
NRC Docket No. 50-16  
NRC License No. DPR-9
  - 2.) Fermi 2  
NRC Docket No. 50-341  
NRC License No. NPF-43
  - 3.) Federal Register Notice RIN 3150-AG56, "Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan", Vol. 66, No. 171, dated September 4, 2001
  - 4.) Detroit Edison letter, NRC-00-0087, "License Termination Survey Question", dated July 12, 2000
  - 5.) NRC Letter, "U.S. Nuclear Regulatory Commission Staff's Response to Detroit Edison's Letter dated July 12, 2000", dated September 20, 2000

Subject: Comments on Proposed Rule on Partial Site Release

Detroit Edison appreciates the opportunity to provide comments on the proposed rule on partial site release presented in Reference 3. Detroit Edison is the licensee for Fermi 2, an operating Boiling Water Reactor, and Fermi 1, a Fast Breeder Reactor currently being decommissioned. Comments are also included on the regulatory analysis the NRC prepared for the proposed rule.

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SECY-02



### Summary of Comments

In general, Detroit Edison agrees the proposed requirements for releasing part of a site prior to license termination for unrestricted use are stringent, but reasonable. The company's main concerns deal with record keeping and how the proposed rule and accompanying Federal Register discussion impact the ability to terminate a facility's license when that facility is located on a multi-unit site. The latter is not a partial release issue, but arises due to language used to support the partial release option. Additionally, the final rule needs to allow implementation time, since the record keeping additions may be time consuming, depending on the site's history and the wording in the final rule.

### Comments on Ability to Terminate a License on Multi-Unit Site

The language in the proposed rule and discussion clarify that the intent of the license termination rule is that the entire site as defined in the original license needs to meet the license termination rule criteria at the time of license termination. While Detroit Edison agrees that this clarification describes the normal situation, it does not cover the situation of terminating the license of a facility on a multi-unit site. While the current rule uses the term "site" extensively, since it is not defined as the original site at time of licensing, some flexibility exists. Currently, the license termination plan would need to clearly address the site for which the license is being terminated and that would be subject to NRC review and public scrutiny.

For example, the Fermi 1 original licensee (Power Reactor Development Company – PRDC) leased a portion of a site owned by Detroit Edison for the Fermi 1 nuclear facility. Detroit Edison became the licensee for Fermi 1 in 1976 upon the completion of the original decommissioning. When Fermi 2 was constructed, the larger Fermi 2 site encompassed the Fermi 1 site originally leased by PRDC and the land Detroit Edison had owned when Fermi 1 was licensed. The entire owner controlled area is considered the Fermi 2 site, with Fermi 1 encompassing strictly the section of the site containing the Fermi 1 facility. Detroit Edison representatives met with NRC representatives at a public meeting on June 2, 2000 to discuss Fermi 1 status and potential issues if Detroit Edison were to pursue further decommissioning at Fermi 1. One issue discussed was whether the Fermi 1 license could be terminated since it is on a portion of the Fermi 2 site plot. The Fermi 1 site would be considered as the footprint of the buildings within the road surrounding Fermi 1. There was agreement that the Fermi 1 license could be terminated if regulations and criteria for license termination are met. The land and any remaining buildings after Fermi 1 license termination would still be considered part of the Fermi 2 site. This topic was documented in Reference 4. In Reference 5, the NRC specified that the Fermi 1 site, when its license is terminated, instantly becomes part of the Fermi 2 site as it lies within the owner controlled area due to the co-location of Fermi 1 and 2. Detroit Edison is concerned that if the partial site release rule is approved as written coupled with other standing regulatory guidance, then the Fermi 1 license could no longer be

terminated in accordance with regulations until the Fermi 2 license is also terminated. Detroit Edison made the decision to perform Fermi 1 final nuclear decommissioning in part due to the outcome of the June 2, 2000 meeting and subsequent correspondence.

It would not be in the licensee, NRC, or public interest to discourage cleanup and license termination activities as a side effect of instituting a consistent method of partial site releases. Nor should a new rule knowingly create the need for an exemption request. If this proposed rule is adopted, language should be added to allow termination of a license if license termination criteria are met for that facility, even if the remainder of the original site is part of the site for another license.

#### Comments on Record Keeping

Regarding record keeping, gathering and adding records to provide information defining the site boundary as originally licensed and any additions or disposition of property would take time, dependent on the history of the site. Placing this information in the decommissioning record system will also take time. For property added over time, it would make sense to place the current site boundary in the decommissioning records at the time of rule implementation, rather than research and separately locate each record of acquisition in the past. Since the goal is to ensure the site boundary is known, and that any dispositions/release of property are known, there is no real benefit in locating and placing records of past individual acquisitions into the decommissioning records.

Additionally, records of licensed activities on property acquired since original licensing should not need to be maintained as separate decommissioning records if the acquired property is assimilated into the licensed site. Acquired property should be treated no differently than originally owned property from a decommissioning record perspective. The existing requirements for decommissioning records should apply to the site equally, regardless of whether the portion of the site was purchased after original licensing or before.

#### Additional Comments

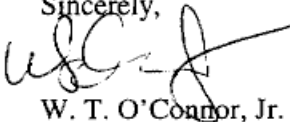
Detroit Edison has three additional minor comments.

- Regarding release of impacted areas under the proposed partial release rule, 10 CFR 50.59 will not apply, since a license amendment would be required. Therefore, the wording in proposed section 10 CFR 50.83 (d)(1) should be modified.
- The regulatory analysis addresses costs of final surveys. While the \$260K estimate for partial site release survey and remediation may be valid, the actual costs for final surveys have significantly exceeded the \$200K value in the 1997 NRC sponsored decommissioning cost estimate.

U.S. NRC  
NRC-01-0057  
November 5, 2001  
Page 4

- The cost portion of the regulatory analysis should also include costs of researching site history and property additions, and use of the portion of the property that was added, if the requirement for this data to be maintained as decommissioning records is retained in the final rule.

If there are any questions on these comments, please contact Ms. Lynne Goodman at 734-586-1205.

Sincerely,  
  
W. T. O'Connor, Jr.  
Vice President, Nuclear Generation

WTO/LSG/ljd

cc: S. W. Brown  
T. J. Kim, Fermi 2 NRC Project Manager  
D. Minaar (State of Michigan)  
NRC Resident Inspector  
NRC Region III Administrator  
Supervisor, Electric Operators,  
Michigan Public Service Commission

DUCKET NUMBER  
PROPOSED RULE PR 2,20+50  
(66FR 46230)

STATE OF ILLINOIS

# DEPARTMENT OF NUCLEAR SAFETY

1035 OUTER PARK DRIVE • SPRINGFIELD, ILLINOIS 62704  
217-785-9900 - 217-782-6133 (TDD)

10

George H. Ryan  
Governor

Thomas W. Orteiger  
Director

DOCKETED  
USNRC

November 21, 2001

December 17, 2001 (12:02PM)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
Attn: Rulemakings and Adjudications Staff

Re: Proposed Rule RIN 3150-AG56, amending 10 CFR Parts 2, 20, and 50  
*"Releasing Part of a Power Reactor Site or Facility for Unrestricted Use  
Before the NRC Approves the License Termination Plan"*

Dear Secretary and Staff Members:

The Illinois Department of Nuclear Safety (Department) has reviewed the above referenced proposed rule. The Department's comments follow.

## 1. State Participation

The proposed rule is silent with regard to participation by state regulatory agencies. While there are general provisions for stakeholder input and public participation, notification, meetings and hearings, there is no explicit provision for "hands-on" involvement by state regulators. The Department would like the rule amended to include explicit provisions for state participation.

In Illinois, the role of the state in federally regulated site clearance processes has historically been that of "independent verification." This role assures that the site release process is in compliance with applicable state regulations and lends additional credibility to a process that is inherently predisposed to intense public scrutiny. Participation by the state is also important in the event that portions of the property to be released would be transferred to state ownership and/or control. For these reasons, amending the proposed rule to provide for independent verification by state regulators makes good sense.



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## 2. Non-Impacted Sites

The proposed rule defers to the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) for guidance in determining whether an area under consideration for partial release is impacted or non-impacted. Areas classified as non-impacted would in all likelihood be subject to release for unrestricted use without benefit of a radiological survey and the empirical data derived therefrom. NRC supports its "non-survey" position by noting that surveying a truly non-impacted area necessarily involves demonstrating that the radioactivity from any residual contamination is indistinguishable from natural background radioactivity. NRC further supports its position, at FR notice page 46231, by stating that since it has not established a minimum value above mean background to compare survey results, surveying such areas is not feasible.

The Department disagrees with NRC's reasoning because for an unrestricted release, the ALARA requirements of 10 CFR 20.1402 may dictate clean up to levels indistinguishable from natural background. ALARA notwithstanding, background must necessarily be defined to demonstrate compliance with any level of dose allowed by Part 20.1402 whether it is background or 25 mrem/yr.

The Department recognizes that proper definition of background is problematic because it is not a single value but rather a statistical distribution of values that varies widely with geographic location and other factors. Nevertheless, it is a statistical entity [mean +/- (sd x n)] that can be empirically determined on a case-by-case basis. The "minimum value above mean background against which to compare survey results" can be established by setting a reasonable value for "n" in the foregoing expression. Alternatively, the proposed rule could incorporate MARSSIM's approach wherein a comparison of statistical distributions (survey vs. background) is used to determine whether radiation levels in the area surveyed are "indistinguishable" from background. In any event, background is a reality that must be dealt with in any scenario involving release for unrestricted use.

In the case of commercial power reactor sites, background is a well-defined entity because extensive amounts of environmental radiation data have been empirically measured over several decades. Since the preponderance of these measurements reflect natural background radiation, a considerable data base statistically defining background at reactor sites is readily available.

MARSSIM's alternative to a radiological survey is a "Historical Site Investigation" wherein "existing data and professional judgment" are used to

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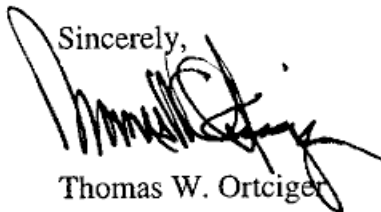
determine whether or not an area is impacted. Except for cases where the "existing data" are from up-to-date radiation surveys, this approach is susceptible to uncertainties leading to results that are less reliable and, therefore, more difficult to defend. This is contrary to the proposed rule's stated purpose:

"...provide adequate assurance that residual radioactivity from licensed activities that remains in areas released for unrestricted use will meet the radiological criteria for license termination. It should increase public confidence in decisions to release parts of reactor sites and make more efficient use of NRC and licensee resources."

A methodology producing less reliable and defensible results provides neither "adequate assurance" nor "increase[d] public confidence." Without contemporary and overwhelming empirical data indicating the absence of contamination, any action classifying a site as "non-impacted" supplicates challenge. In many, and possibly most cases, it might be easier and less expensive simply to survey the site. However, we recognize that this is contrary to NRC's general aversion of collecting and analyzing empirical information. Over time, this straightforward approach would likely "make more efficient use of NRC and licensee resources."

The Department appreciates the opportunity to submit these comments and looks forward to their inclusion in the final rule.

Sincerely,



Thomas W. Ortziger  
Director

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OFFICE OF THE SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

November 19, 2001

DOCKET NUMBER  
PROPOSED RULE **PR 2, 20, 50**  
**(66 FR 46230)**

U. S. Nuclear Regulatory Commission  
ATTN: Rulemaking and Adjudications Staff  
Washington, D.C. 20555-0001

Subject: Response to Request for Comments on Proposed Rule Regarding  
Releasing Part of a Power Reactor Site or Facility for Unrestricted  
Use Before the NRC Approves the License Termination Plan

Reference: Volume 66, Federal Register, Page 46230 (66 FR 46230), dated  
September 4, 2001

This letter is being submitted in response to the Nuclear Regulatory Commission's (NRC) proposed rule to amend 10CFR Parts 2, 20, and 50. The NRC is proposing to amend its regulations to standardize the process for allowing a power reactor licensee to release part of its facility or site for unrestricted use before the NRC approves the license termination plan (LTP). This type of release is termed a "partial site release." The proposed rule would identify the criteria and regulatory framework that a licensee would use to request NRC approval for a partial site release and provide additional assurance that residual radioactivity would meet the radiological criteria for license termination, even if parts of the site were released before a licensee submits its LTP to the NRC.

Exelon Generation Company, LLC appreciates the opportunity to comment on the proposed rule and supports the comments submitted on behalf of the nuclear energy industry, by the Nuclear Energy Institute.

Respectfully,



Michael P. Gallagher  
Director, Licensing and Regulatory Affairs  
Mid-Atlantic Regional Operating Group

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SECY-02