

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

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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.

/RA/

William D. Travers
Executive Director for Operations

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

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*See previous concurrence ADAMS ACCESSION # ML023310021

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