SECY-00-0023

February 2, 2000

FOR: The Commissioners

FROM: William D. Travers /RA/
Executive Director for Operations

SUBJECT: RULEMAKING PLAN 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

PURPOSE:

To request Commission approval, by negative consent, to proceed with rulemaking in accordance with the attached rulemaking plan 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).

SUMMARY:

The decommissioning and license termination rules of 10 CFR Parts 2, 20, and 50 provide adequate protection of the public and the environment from radioactivity remaining in structures, materials, soils, groundwater, and other media at a reactor site when the reactor license is terminated. However, it is possible for a reactor licensee to sell land that would reduce the size of its site before the license termination criteria would specifically apply to the release of the property. If the sale does not involve the transfer of licensed material, it would not require NRC approval under current regulations. For example, the Oyster Creek licensee did not seek NRC approval for the sale of a large part of its site to a non-licensed third party. The NRC must currently consider changes to the site boundary of a reactor site on a case-by-case basis to assure adequate protection of the public and the environment.

In its review of the proposed sale of property that is part of the Oyster Creek plant site, the staff concluded that current regulations do not address certain issues raised by a licensee's action to release a part of its reactor facility or site for unrestricted use before it receives NRC approval of its LTP. Because several reactor licensees have expressed interest in selling parts of their sites before they receive approval of their LTPs, the staff believes the issues should be resolved generically.

The staff proposes adding a new section to 10 CFR Part 50, separate from the current decommissioning and license termination rules, that identifies the criteria and regulatory framework that a licensee would use to request NRC approval for a partial site release(1). The suggested regulation (enclosure to rulemaking plan) would 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. The regulation at 10 CFR Part 20, Subpart E, would be amended to clarify that the radiological criteria for unrestricted use apply to a partial site release. Finally, 10 CFR Part 2 would be amended to provide for a Subpart L hearing if a license amendment involving a partial site release is challenged.

BACKGROUND:

The decommissioning and license termination rules of 10 CFR Parts 2, 20, and 50, provide adequate protection of the public and the environment from radioactivity remaining in structures, materials, soils, groundwater, and other media at a reactor site when the reactor license is terminated. The staff makes its determination that the licensee has met the license termination criteria using information submitted by the licensee in its LTP and terminal radiation survey. The LTP is not required until 2 years before the anticipated date of license termination. The terminal radiation survey is not required until after the licensee completes its decommissioning activities. The timing of these requirements was based on stakeholder input and the staff's anticipation that reactor licensees would permanently cease operations, and then perform the decommissioning and license termination of the site as one large project. However, in 1999, the Oyster Creek licensee informed the staff that it was selling parts of its facility and site before it permanently ceased operations. Oyster Creek believed that NRC approval was not required for the sale because there was no radioactivity above background in the areas to be sold to a non-licensed third party. 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 LTP and terminal radiation survey.

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

However, the staff concluded that current regulations in 10 CFR Part 50 do not address the release of part of a reactor facility or site for unrestricted use before NRC approval of the LTP is received by the licensee. Current regulations do not require a licensee 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, do not require a reactor licensee to demonstrate compliance with the radiological criteria for unrestricted use if a partial site release is performed. 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. Although the staff believes the Oyster Creek licensee planned the sale of its property based on business needs only, the regulatory gap found in that case indicates that 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 requests termination of its 10 CFR Part 50 license.

In order to cover the regulatory gap in 10 CFR Parts 20 and 50, the staff believes rulemaking is needed to (1) clarify that the radiological criteria of 10 CFR Part 20, Subpart E (25mrem/yr reduced to as low as reasonably achievable [ALARA]) apply to a partial site release, (2) maintain public confidence, and (3) make efficient use of NRC and licensee resources. This rulemaking would provide greater assurance that residual radioactivity from licensed activities that remains in areas released for unrestricted use will be within the radiological criteria for license termination.

Preliminary input from stakeholders was obtained on August 18, 1999, at the LTP Workshop sponsored by the Office of Nuclear Material Safety and Safeguards (NMSS). The suggested approach to handling the release of part of a power reactor facility or site for unrestricted use was presented to the attendees for comment. Utility and nuclear industry representatives indicated that licensees need a method to allow them to release parts of a site before approval of the LTP is received. Utility representatives stated that formal NRC action would be desirable to provide legal closure after part of a reactor site or facility is released. The attached rulemaking plan addresses issues raised at the workshop (Attachment 1).

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

DISCUSSION:

During 1999, licensees of operating and decommissioning power reactor plants expressed interest in releasing parts of their facilities and sites for unrestricted use before they received approval of their LTPs. Previously, reactor site boundaries rarely changed. The staff is aware of five reactor licensees that made site boundary changes between 1975 and 1994, consisting of four reductions and one expansion, ranging from ½ acre to 87 acres (see Attachment 2). The NRC's response ranged from no action to issuance of a license amendment requiring installation of iodine filtration equipment. (The largest change was an 87-acre reduction at the General Atomics TRIGA F reactor at Vallecitos, California. Because the site boundary was moved much closer to the reactor, iodine filtration equipment was required.) All the changes were made before the 1996 amendment of the reactor license termination rule (July 29, 1996; 61 FR 39278) in 10 CFR Part 50 and the 1997 issuance of radiological criteria for license termination (July 21, 1997; 62 FR 39058) in 10 CFR Part 20, Subpart E.

The NRC's experience indicates that a consistent regulatory method is needed to address the increasing interest in partial site releases at reactor sites. The staff believes the changes needed are procedural in nature. The technical issues involved in releasing land for unrestricted use have been previously evaluated for other rulemakings (the 1996 decommissioning rule amendment and the 1997 issuance of radiological criteria for license termination) and the staff does not need new methodology to address them. However, there is concern that synergistic dose effects could occur between parts of a site released before license termination and the remainder of the site as it exists when the license is terminated. For example, a partial site release that resulted in a 15 mrem/yr dose due to direct radiation from residual radioactivity would likely be acceptable. However, if the remainder of the site, as it existed at the time of license termination, resulted in a 15 mrem/yr dose due to eating crops grown on the land, the combined dose could exceed the radiological limit of 25 mrem/yr imposed by § 20.1402. Because the two property releases would take place at different times, a method is required to provide assurance that the combined doses do not exceed the limits of § 20.1402. The suggested rule would require maintaining records of property line changes and the radiological conditions of partial site releases to assure that any such effects, if they occur, are considered at the time of license termination. The additional records would provide information to evaluate synergistic dose effects and to assure licensee compliance with the criteria of the license termination rule. The rulemaking plan also proposes funding for technical assistance to determine the extent to which synergistic dose effects impact the overall dose assessment for the site. The final rule would consider the result of that evaluation.

An important motivation for the suggested rule is that reactor sites often cover many acres of land that contain little or no radioactive material and readily meet the radiological release criteria for unrestricted use. These areas, in many cases, are not required for safety reasons or to satisfy reactor siting criteria. The staff's intent is to provide a method, through rulemaking, for licensees to release that land for unrestricted use without imposing unnecessary regulatory burdens, and without waiting for decommissioning and license termination.

The strategy for crafting the suggested rule is to narrow its applicability to Part 50 licensees. The suggested rule would require NRC approval for a partial site release. The approval process by which the property would be released would depend on the

amount of residual radioactivity present in the area to be released. First, for areas with either no contamination or residual radioactivity that is not distinguishable from background, a licensee would be required to submit a notification containing specific information for NRC approval. In these cases, there is no public dose attributable to the property released, and NRC will approve the release of the property by letter upon determining that the licensee has met the criteria of the suggested rule. Second, for areas that contain some residual radioactivity that is distinguishable from background, the licensee would submit the required information in the form of a license amendment for NRC approval. The amendment would also include the licensee's plan to demonstrate compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402. Regulatory guidance already exists to perform this demonstration. In both cases, public participation requirements and additional record keeping would be addressed.

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

In some cases, a reactor license may contain license conditions or Technical Specifications that define the site boundary in detail, such as including a site map. In these cases, a reactor licensee would be required to submit a license amendment application for a partial site release, regardless of the amount of residual radioactivity contained in the area to be released, because the site boundary would change. However, under current regulations, a licensee could amend its license to remove the definition of site boundary, without reference to a partial site release, and then proceed to perform the release, without the requirement to obtain NRC approval. The suggested rule would require NRC approval for a partial site release regardless of the amount of detail defining the site in the operating license.

In the event that license conditions or Technical Specifications contained sufficient detail to require locating the site boundary in a particular place or to have certain dimensions, resolution of the technical issues would be required before the license could be amended. (This was the case for the site boundary change at the General Atomics TRIGA reactor listed in Attachment 2.) The suggested rule does not relieve a licensee from this requirement.

The suggested 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 it available for public comment. The NRC will also hold a public meeting in the vicinity of the site to discuss the licensee's notification or license amendment request, as applicable.

Members of the public have expressed concern to the staff 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 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 suggested rule would address these concerns.

The suggested rule would not provide for 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 allowed for license termination under restricted conditions. The staff does not propose to change that requirement, nor has any reactor licensee expressed interest in releasing property for restricted use.

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

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

- Add a new section, separate from the license termination process of § 50.82, to address the release of part of a reactor facility or site for unrestricted use before the LTP is approved.
- Specify criteria for the licensee to fulfill to obtain NRC approval of a partial site release.
- Require notification in writing, but not a license amendment, for releases of property that contain residual radioactivity that is not distinguishable from background. The release would be approved if all the proposed criteria are met.
- Require a license amendment that contains a plan to demonstrate compliance with the radiological criteria for unrestricted use (25 mrem/yr and ALARA) for releases of property that contain residual radioactivity that is distinguishable from background.
- Revise the LTP requirements to account for property that was released before a licensee received approval of its LTP.

Require the NRC to hold a public meeting to inform the public of the partial site release and receive public comments.

- Require additional record keeping of the acquisition and disposition of property included in the site.
- Add supporting definitions of key terms.

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

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

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

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

INTEGRATION WITH PART 50 DECOMMISSIONING RULEMAKING

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

INTEGRATION WITH PARTS 30, 40, 70, AND 72

The license termination and decommissioning rules of Parts 30, 40, 70, and 72 provide some guidance for partial site releases at materials sites. The method included in these Parts differs from the suggested rule for Part 50.

The staff considered recommending changes to revise the license termination and decommissioning rules of Parts 30, 40, 70, and 72 to conform to the changes proposed for Part 50. However, due to the technical complexity of materials sites, the staff will address the issue at a later time.

The staff believes that considering changes to Part 50 separately from Parts 30, 40, 70, and 72 will not affect materials licensees; therefore, it is not necessary to revise the license termination and decommissioning rules of all portions of 10 CFR concurrently. Because the industry expressed a near term need to address partial site releases for Part 50 licensees, the staff recommends proceeding with the attached rulemaking plan before resolution of the technical issues at materials sites would be completed.

STAKEHOLDER INVOLVEMENT

The staff plans to hold stakeholder workshops prior to issuance of the final rule. In addition, the staff plans to issue a generic communication to licensees informing them that the staff plans to continue handling partial site release requests on a case-by-case basis during the rulemaking effort.

COMPATIBILITY OF AGREEMENT STATE REGULATIONS

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

COORDINATION

The Office of the General Counsel has no legal objection to the rulemaking plan. The Office of the Chief Financial Officer has reviewed the Commission paper for resource implications and has no objection. The Office of the Chief Information Officer has reviewed the rulemaking plan for information technology and information management implications and concurs in it. However, the plan suggests changes in information collection requirements that must be submitted to the Office of Management and Budget (OMB) no later than the date the proposed rule is forwarded to the *Federal Register* for publication. The Office of State Programs has no objections to this rulemaking plan.

RESOURCES

The total resource estimate to complete this rulemaking is approximately 3.0 FTE, which is currently not in the budget. Resources will need to be reprogrammed for FY 2000, 2001, and budgeted for FY 2002 to meet the schedule proposed in the rulemaking plan. FTE usage is estimated to be 0.5 for FY 2000, 1.0 for FY 2001, and 1.5 for FY 2002. The amount of estimated technical assistance of $250,000 will need to be reprogrammed for FY 2001 to determine the extent of interactive or synergistic dose effects between portions of a reactor site released for unrestricted use before approval of the LTP and the site as it exists at the time of license termination.

The staff has not yet allocated resources for this rulemaking. If approved, the rulemaking plan will be evaluated through the

Planning, Budgeting, and Performance Management process to establish its priority, assign resources, and determine a final schedule.

RECOMMENDATION

That the Commission approve, by negative consent, the staff's rulemaking plan to amend 10 CFR Parts 2, 20, and 50 to standardize a process for a licensee to request and be granted permission to perform a partial site release.

Staff request action within 10 days. Action will not be taken until the SRM is received. We consider this action to be within the delegated authority of the EDO.

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

ATTACHMENT 1

Rulemaking Plan
10 CFR Parts 2, 20, and 50

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

REGULATORY ISSUE

In Part 50 of Title 10 of the *Code of Federal Regulation* (10 CFR), the Commission has no provisions setting forth a process for

a licensee to request and be granted permission for releasing part of a power reactor site or facility for unrestricted use before the NRC approves the license termination plan (LTP) ("partial site release"). In the past such requests have been considered on a case-by-case basis. However, licensees of operating and decommissioning reactors have made plans to perform such releases. An amendment to the NRC's regulations is required to standardize a process, which would address a partial site release in accordance with criteria that will adequately protect the public health and safety.

EXISTING REGULATORY FRAMEWORK

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

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

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

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

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

No statement is made in Part 2, Subpart L regarding its applicability to partial site releases at reactor sites. However, the staff believes that conditions in a part of a facility or site released for unrestricted use are equivalent to the conditions specified in § 2.1201(a)(3), and that Part 2, Subpart L is the appropriate level for hearings requested in response to an amendment for a partial site release. An amendment to Part 2, Subpart L is required to permit use of these informal hearing procedures for these amendments. It should be noted that the suggested rulemaking would not require a license amendment for partial site releases that contain no residual radioactivity in the areas that are released, nor for those in which a licensee demonstrates that the level of residual radioactivity is not distinguishable from background. Therefore, for cases in which there is no public dose attributable to the property released for unrestricted use, no opportunity to request a hearing would normally be available.

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

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

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

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

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

Two conclusions can be drawn from the dose limits and demonstrations of compliance imposed on a licensee's actions. First, a partial site release for unrestricted use that contains residual radioactivity that is distinguishable from background may have

to meet a standard lower than the radiological criteria of 10 CFR Part 20 Subpart E (25 mrem/yr and ALARA [as low as is reasonable achievable]). This is because the combined dose from the partial site release and the dose from the reactor facility must meet the EPA's fuel cycle dose limit of 25 mrem/yr. Although an operating plant's offsite dose contributions from direct radiation and effluent releases are normally quite low, site-specific evaluation is required to quantify them. This limitation does not exist when a reactor license is terminated. Second, a licensee may need to revise its demonstration of compliance with the public dose limits to include the dose, if any, from a partial site release.

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

The scope of Subpart E applies to decommissioning reactor facilities. However, as currently written, it does not specifically apply to operating reactors. Once the operating license is issued, a licensee may categorize its reactor facility as operating or decommissioning. The reactor remains "operating" until a licensee submits the certifications of permanent cessation of operations specified in § 50.82(a)(1), when it becomes "decommissioning."

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

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

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

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10 CFR Part 20 Subpart E
License Termination Criteria

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

The rulemaking is intended to apply Subpart E to reactor licensees 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 receiving approval of the LTP.

The suggested rule would not require a demonstration that the area to be released meets the criteria of § 20.1402 for cases where there is no residual radioactivity or it is not distinguishable from background. In these cases, there is no dose attributable to the area released, and no demonstration of compliance with § 20.1402 is necessary. However, the suggested rule would require a licensee to provide documentation to support its conclusion that the area to be released does not contain residual radioactivity that is distinguishable from background. In addition, the NRC would be required to make a determination

that the licensee's notification is adequate in order to approve the partial site release.

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

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

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

Section 20.2002 of 10 CFR Part 20, Subpart K, allows a licensee to request Commission approval of a proposed disposal method. The staff does not believe § 20.2002 is appropriate for the purpose of approving a partial site release. However, because the regulation applies to "proposed procedures, not otherwise authorized in the regulations in this chapter, to dispose of licensed material generated in the licensee's activities," it is possible for a licensee to invoke the regulation for a partial site release. Because there is no well-developed staff position on the standards for evaluating applications submitted for "proposed procedures," the use of § 20.2002 would continue the case-by-case approach to the issue and could result in inconsistent application of safety standards.

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

10 CFR 20.1003, "Definitions"

"Site boundary"

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

One could argue that a licensee could sell property and not include it in its LTP, which would relieve a licensee of the requirement to demonstrate compliance with the radiological criteria for unrestricted use. However, it is the staff's view that the intent of the current license termination rule is to assure that the entire site, as defined in the original license, will be included in the LTP to assure that the full area meets the requirements of 10 CFR Part 20, Subpart E, at the time the license is terminated. The rulemaking would clarify this potential ambiguity by making it clear that a piecemeal approach to site reduction cannot be used to avoid applying the criteria of the license termination rule to the residual radioactivity remaining on the entire site as originally licensed.

In the context of Part 50, the definition of "site boundary" is applied primarily for emergency planning purposes, to define the point at which offsite dose consequences are to be estimated for purposes of defining emergency action classes and making protective action measure recommendations. The site boundary is also often referred to in reactor plant technical specifications (TSs) for the purpose of defining the point at which effluents must meet the dose and concentration limits of 10 CFR Part 20. Changes to the site boundary could affect a licensee's emergency plan or effluent dose calculations. Therefore, the suggested rule would require a licensee to evaluate the change to assure that it would continue to comply with applicable regulatory requirements.

The staff does not propose changing the definition of "site boundary." Rather, the suggested rule would revise § 50.75(g) to require a licensee to maintain records of its site as originally licensed. Additional record keeping would be required to track changes in the site and preserve information about the radiological conditions of any partial site releases. When a licensee requests license termination, the earlier partial site releases, if any, would be included in the evaluation so that the entire site meets the criteria for license termination in 10 CFR Part 20, Subpart E. These suggested record keeping requirements would clarify what area is included in the site for purposes of site release and eventual license termination.

"Distinguishable from background"

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

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

"Residual radioactivity"

The term "residual radioactivity" is used in the suggested rule. Section 20.1003 contains the following definition of the term: "Residual radioactivity means radioactivity in structures, materials, soils, groundwater, and other media at a site resulting from activities under the licensee's control. This includes radioactivity from all licensed and unlicensed sources used by the licensee, but excludes background radiation. It also includes radioactive materials remaining at the site as a result of routine or accidental releases of radioactive material at the site and previous burials at the site, even if those burials were made in accordance with the provisions of 10 CFR part 20."

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

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

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

The sections listed above were issued on July 15, 1994 (59 FR 36026), as part of the "timeliness in decommissioning" rule for materials facilities. The rule was issued to avoid long periods of delay in decommissioning materials facilities following cessation of operations. Unlike reactor facilities, where a period of safe storage can result in reduced occupational radiation exposure for decommissioning, materials facilities do not realize much dose reduction benefit from an extended period of storage. The difference is due to the predominance of long-lived nuclides present in the radioactive contamination at materials facilities.

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

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

10 CFR 50.2, "Definitions"

"Decommissioning"

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

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

Suggested Inclusion of Additional Terms

The staff issued technical guidance after the decommissioning rules of § 50.82 were amended in 1996. Included in those documents was NUREG-1575, which defined terms (historical site assessment, impacted, and non-impacted) that are critical

to implementing the amended regulations. In order for a licensee to adequately demonstrate compliance with the radiological criteria for license termination in 10 CFR Part 20, Subpart E, it must evaluate its site to identify areas of potential or known sources of radioactive material and classify those areas according to the potential for radioactive contamination. The evaluation is known as a *historical site assessment*. That assessment results in classifying areas according to the potential for containing radioactive material. An area classified as *impacted* has some potential for contamination, and must be surveyed (and perhaps remediated) to demonstrate compliance with the release criteria. An area classified as *non-impacted* has no reasonable potential for contamination and need not be surveyed to demonstrate compliance with the radiological criteria for release. These definitions are not in § 50.2. The staff proposes to add them, because the terms will be used in the rulemaking.

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

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

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

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

10 CFR 50.36, "Technical specifications"

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

In cases where a reactor license contains license conditions or Technical Specifications that define the site boundary in detail, a reactor licensee would be required to submit a license amendment application for a partial site release, regardless of the amount of residual radioactivity contained in the area to be released, because the site boundary would change. However, guidance presented in standardized Technical Specifications suggests that a brief text description of the site is sufficient to satisfy regulatory requirements. Therefore, under current regulations, a licensee could amend its license to remove the detailed definition of its site boundary, without reference to a partial site release, and then proceed to perform the release, without the requirement to obtain NRC approval. The suggested rule would require NRC approval for a partial site release regardless of the amount of detail defining the site in the operating license.

The location or dimensions of the site boundary may, in some cases, be specified in detail in the reactor license on the basis of safety standards. In these cases, a licensee is required to provide appropriate technical justification in order to change the site boundary via license amendment. The suggested rule would not relieve a licensee from this requirement, even if the licensee meets all the other suggested requirements for performing a partial site release.

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

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

10 CFR 50.75, "Reporting and record keeping for decommissioning planning"

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. From one point of view, it can be argued that a partial site release would reduce the cost of decommissioning the remainder of the site. However, the staff does not recommend 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, and, therefore, an evaluation of the costs would be necessary to determine what adjustment, if any, was appropriate. In addition, the cost of a partial site release will be a small fraction of the cost of decommissioning. Such a small adjustment can be considered within the uncertainty range 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. The staff believes that information on structures and land that were included as part of the site is also important to decommissioning in order to assure that potential synergistic dose effects from partial releases are adequately accounted for when the license is terminated. The suggested rulemaking would require a licensee to identify its facility and site, as defined in the original license, to include a map, and to record any additions to or deletions from the site since original licensing, along with records of the radiological conditions of any partial site releases.

10 CFR 50.82, "Termination of license"

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

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

Some requirements of § 50.82 apply to all power reactor licensees even before entering the decommissioning phase. In § 50.82(a)(6), the NRC limits the decommissioning activities a reactor licensee may perform to those that will permit release of the site for unrestricted use. In § 50.82(a)(8)(ii), the NRC limits access to the decommissioning trust fund to no more than 3 percent of the generic amount required by § 50.75(c), and limits use of the funds to planning purposes only, until the licensee submits the certifications of § 50.82(a)(1) and its post-shutdown decommissioning activities report (PSDAR). Both of these requirements will remain unchanged. Thus, a partial site release, once the regulatory process to allow it is put in place, must be for unrestricted use and a licensee may not use decommissioning trust funds to perform the release unless it has made the certifications of § 50.82(a)(1) and submitted its PSDAR.

The requirement of § 50.82(a)(9) to submit an LTP codifies the staff's views that: (1) 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 (2) the license termination criteria are applicable to the entire site as originally licensed. 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 is required to submit the necessary information. Thus, contrary to the staff's view on the necessity for evaluating appropriate information, a licensee is not specifically required to submit information on site characterization, site remediation (if needed), description of the end use of the site, or the final survey at the time a partial site release is performed. One should also note that the information required when the LTP is submitted refers to the "site." If a partial site release is performed before submittal of the LTP, and that part of the facility or site is no longer "owned, leased, or otherwise controlled by the licensee," notwithstanding the staff's view that the LTP applies to the entire site as originally licensed, it is not clear that a licensee could be required to include the areas released because they no longer are part of the "site." Effectively, a partial site release could result in a licensee adopting a piecemeal approach to relinquish responsibility for a part of its site without going through the license termination process.

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

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

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

A reactor licensee is not directly required to demonstrate compliance with the radiological criteria for license termination in 10 CFR Part 20, Subpart E, under current regulations. Rather, § 50.82(a)(11)(ii) requires the Commission to make a determination that the final survey and associated documentation provided by a licensee demonstrate that the "site" is suitable for release at the time the license is terminated. Two consequences follow from this regulatory mechanism. First, before the license is terminated, no demonstration of compliance with the radiological criteria of 10 CFR Part 20, Subpart E, is required. In particular, a licensee is not required to make such a demonstration for a partial site release performed before the LTP is submitted. Second, under current regulations, once a partial site release is made, and the property is sold to another entity, the parts of the facility or site that were released are no longer required to be included in the definition of "site" and would not be included in the LTP when it is submitted. Therefore, a licensee would not be required to demonstrate compliance with the radiological criteria for license termination for a partial site release completed before its LTP was submitted at any time after the LTP is submitted. Consequently, under current regulations, there is no particular time at which a licensee must demonstrate compliance with the radiological criteria for license termination for a partial site release completed before its LTP is submitted.

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

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

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

10 CFR 100.21, "Non-seismic siting criteria"

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

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

RULEMAKING OPTIONS

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

Advantage

- No resources are required to perform rulemaking.

Disadvantages

- Lack of regulation specifically applying the radiological criteria for unrestricted use to a partial site release could result in dose to the public in excess of the limits specified in 10 CFR Part 20, Subpart E (25 mrem/yr reduced to ALARA).
- Lack of regulations providing a standardized process for requesting approval for a partial site release could result in inconsistent or unnecessary standards applied to a licensee and may cause unnecessary industry and NRC resource expenditures in determining appropriate standards and process for each case.
- Lack of regulations providing a standardized process for requesting approval for a partial site release may 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 application of the license termination criteria.

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

Advantages

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

Disadvantages

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

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

Advantages

- Same as Option 2 for reactor licensees.
- Provides greater consistency for partial releases for all classes of licensees.
- May result in greater efficiency by combining rulemaking into a single large effort.

Disadvantages

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

RECOMMENDED APPROACH

Option 2: Proceed with rulemaking to revise 10 CFR Parts 2, 20, and 50 to address partial site releases for reactor licensees.

THE OFFICE OF THE GENERAL COUNSEL (OGC) ANALYSIS

The Office of the General Counsel has reviewed this rulemaking plan which provides for a process to release a portion of a reactor site. It addresses the information needed by the staff to make a regulatory decision consistent with the License Termination Rule (LTR) in 10 CFR Part 20, Subpart E. It ensures that residual radioactivity at the reactor site, as originally licensed, from licensed activities is within the criteria of the LTR. In addition, it addresses plans to amend 10 CFR Part 2 to provide for Subpart L procedures for hearings on amendments associated with partial site releases.

In developing this plan, the staff has given appropriate consideration to the Paper Reduction Act, Small Business Regulatory Enforcement Fairness Act (SBREFA), and the National Environmental Policy Act. As the rulemaking plan points out, a regulatory analysis, an environmental assessment, and an OMB paperwork clearance package will be required. The staff will verify with OMB that the rule would not be a "major rule" within the meaning of the SBREFA.

As to backfit considerations, the initial view is that a backfit analysis is not needed because:

(1) The rule would clarify the application of the 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.

(2) The purpose of the LTR and 10 CFR 50.82 is to ensure that the residual radioactivity for the licensed activity is

within the criteria of the LTR. While the Statement of Considerations for the LTR provided for a limited grandfathering for previously approved partial site releases, the Statement of Considerations provides that the rule requires that any previously on-site disposals be reconsidered in determining site release under the LTR. Thus, the intent of the LTR was to consider the whole site for application of the release criteria. That is any site area controlled during the duration of the license should be considered. It would be unreasonable to read the LTR as suggesting that it would be acceptable to divide a site into separate parcels and, thereafter, apply the LTR to each. Such an approach could result in doses in excess of the doses in the LTR. Thus, this rulemaking would be clarifying the intent of the LTR and not be establishing new policies or standards.

The backfitting position will need to be addressed and documented during the rulemaking.

The plan provides for two types of approvals to permit the release of portions of a site. A letter would be used to approve a partial site release if the partial site is non-impacted or contains residual radioactivity that is not distinguishable from background. A license amendment would be used to approve a partial site release if the partial site contains residual radioactivity which is distinguishable from background. If a hearing was requested on such an amendment, the procedures of 10 CFR Part 2, Subpart L, would be used. Subpart L in the past has been used for certain material license amendments, certain operator license proceedings, and amendments of Part 50 licenses after permanent removal of fuel from the Part 50 facility. OGC notes that this rulemaking plan proposes to consider expanding the application of Subpart L to hearings on amendments for partial site releases where there may be an operating reactor on site. While under past practice Subpart G procedures are the norm for operating reactors, the amendments underlying the hearing requests would be primarily addressing the transfer of land and not licensed operations. The principal focus would be on radiological issues relevant to the license termination rule, 10 CFR Part 20, Subpart E, similar to issues in material licensing which are subject to the Subpart L procedures of 10 CFR Part 2. Since the underlying issue of site release is more akin to material regulation where the current Subpart L had long-standing application, OGC is of the view that Subpart L procedures may be appropriate for hearings on partial site release amendments under current regulations.

In OGC's view, the letter approval should not constitute a license amendment. It does not alter the terms of a specific license. Consistent with the Commission's position in Cleveland Electric Illuminating Company, et al (Perry Nuclear Power Plant, Unit 1), CLI-96-13, 44 NRC 315 (1996), the staff's review of the licensee's proposal for a partial site that is either non-impacted or contains residual radioactivity that is not distinguishable from background would be essentially an enforcement review to determine if the licensee was operating within the suggested regulation.

OGC has determined that there are no known bases for legal objection for proceeding with the contemplated rulemaking.

BACKFIT CONSIDERATIONS

In accordance with 10 CFR 50.109(a)(4), the staff's initial evaluation of the suggested revisions to 10 CFR Part 50 found that a backfit analysis is not required because they comply with the exception criteria of 10 CFR 50.109(a)(4)(i) and (ii). The suggested revisions are required to bring a facility that performs a partial site release into compliance with the rules of the NRC (the radiological criteria of 10 CFR Part 20, Subpart E), and is necessary to ensure adequate protection of public health and safety (by ensuring that a piecemeal approach cannot be used to avoid application of the license termination criteria). The staff will prepare a documented evaluation justifying this conclusion.

COMPATIBILITY OF AGREEMENT STATE REGULATIONS

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

SUPPORTING DOCUMENTS

This rulemaking would require a detailed regulatory analysis that the staff believes would show a benefit to licensees with no significant adverse impact to the environment or public health and safety. The regulations would be amended to provide for making a partial site release. A backfit analysis does not appear to be needed but a documented evaluation will be prepared justifying this conclusion. An OMB clearance package will be needed because the rulemaking will impose new record keeping and reporting requirements. An environmental assessment would be necessary to demonstrate that there are no significant impacts to the environment and public health and safety.

SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT

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

RESOURCES

The resource estimate to complete this rulemaking is approximately 3.0 FTE, which is not in the budget and will need to be reprogrammed for FY 2000, 2001, and budgeted for FY 2002. The amount of estimated technical assistance of $250,000 will

need to be reprogrammed for FY 2001.

Fiscal Year		FTE	Technical Assistance
2000		0.5	0
2001		1.0	$250,000
2002		1.5	0
	Total	3.0	$250,000

The staff believes the suggested rule provides adequate assurance that a licensee would comply with the criteria of the license termination rule even if a partial site release would be performed. However, there is a concern that synergistic dose effects could occur that would reduce the assurance that the license termination criteria would be met. Therefore, the amount of $250,000 will be budgeted for technical assistance to determine the extent of interactive or synergistic dose effects that could occur between parts of a site released before license termination and the remainder of the site, as it exists when the license is terminated. The final rule would consider the results of the study.

The schedule proposed above is preliminary. The staff has not yet allocated resources for this rulemaking. If approved, the rulemaking plan will be evaluated through the Planning, Budgeting, and Performance Management process to establish its priority, assign resources, and determine a final schedule.

LEAD OFFICE STAFF AND STAFF FROM SUPPORTING OFFICES

Lead Office-Project Management

NRR - To Be Determined

Supporting Offices

NRR - (RGEB) - To Be Determined
NRR - (DRCH) - To Be Determined
NMSS - To Be Determined
OGC - James Lieberman
ADM - David Meyer
OSP - Paul Lohaus

STEERING GROUP

None. The use of a steering group is not necessary to efficiently accomplish the rulemaking effort.

ENHANCED PUBLIC PARTICIPATION

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

EDO OR COMMISSION ISSUANCE

This rulemaking would be issued by the Commission.

SCHEDULE

To Be Determined

Note: OMB review is required and a clearance package will be forwarded to OMB no later than the date the proposed rule is submitted to the Office of the Federal Register for publication.

SUGGESTED CHANGES TO 10 CFR PARTS 2, 20, AND 50 FOR RELEASING PARTS OF A REACTOR SITE

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

1. In § 2.1202, paragraph (a)(4) is added to read as follows:

§ 2.1201 Scope of subpart.

(a) * * *

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

* * * * *

2. In § 20.1401, paragraph (a) is revised to read as follows:

§ 20.1401 General provisions and scope.

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

* * * * *

3. Section 50.2 is revised 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 are areas with some potential for residual contamination.

* * *

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

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

§ 50.75 Reporting and record keeping for decommissioning planning.

(g) * * *

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

(i) Records of the site boundary, as originally licensed, which shall include a site map;

(ii) Records of any acquisition or use of property outside the originally licensed site boundary for the purpose of receiving, possessing, or using licensed materials;

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

(iv) Records of the disposition of any property recorded in paragraphs (4)(i) or (4)(ii) of this section, the historical assessment performed for the disposition, radiation surveys performed to support release of the property, notifications submitted to the NRC in accordance with § 50.83, and the methods employed to assure that the property met the radiological criteria of 10 CFR Part 20 Subpart E at the time the property was released.

* * * * *

5. 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)(G) * * *

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

* * *

(11) * * *

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

* * * * *

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

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

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

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

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

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

(iii) Effluent releases remain within regulatory limits;

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

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

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

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

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

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

(ii) The methods used for and results obtained from the radiation surveys required by the provisions of paragraph (a)(3) of this section;

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

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

(v) The schedule for release of the property.

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

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

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

(iii) Conduct a radiation survey of non-impacted areas as warranted to assure that the licensee's conclusion that the area is non-impacted is adequate; and

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

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

(i) The information specified in paragraphs (a)(4)(i) through (v) of this section; and

(ii) The licensee's plan to demonstrate compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402.

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

Examples of Site Boundary Changes at Reactor Facilities

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

1. "Partial site release" is a shorthand reference for "releasing part of a reactor facility or site for unrestricted use before a licensee receives NRC approval of its LTP."