2065
M-32

Department of Energy
Ohio Field Office
West Valley Demonstration Project
10282 Rock Springs Road
West Valley, NY 14171-9799

March 31, 2000

Dr. Richard A. Meserve, Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: U.S. Department of Energy (DOE) Comments on the U.S. Nuclear Regulatory Commission (NRC) Draft Policy Statement (SECY-99-232)

REFERENCE: Letter (69157), L. W. Camper to B. A. Mazurowski, "U.S. Nuclear Regulatory Commission Draft Policy Statement and Notice of Public Meeting on the NRC's Prescription of Decommissioning Criteria for the U.S. Department of Energy's West Valley Demonstration Project and the West Valley Site," dated December 16, 1999

Dear Dr. Meserve:

I would like to thank you and the other Commissioners for providing the DOE with the opportunity to comment on the NRC's draft Policy Statement for prescribing decommissioning criteria for the West Valley Demonstration Project (WVDP).

The NRC published a draft Policy Statement on December 3, 1999, for establishing the decommissioning criteria for the WVDP/West Valley Site and conducted a public meeting on January 5, 2000, to discuss the draft criteria. Upon review of applicable documentation and of the NRC staff's comments at the January 5 public meeting, DOE finds a number of issues with the draft Policy Statement that should be addressed. Our detailed comments on the draft Policy Statement are enclosed.

The DOE's issues are both procedural and technical, but primarily revolve around the sequence of agency decision making actions reflected in NRC's draft Policy Statement. The importance of this issue cannot be understated, as it relates the fundamental obligations of our respective agencies established under the WVDP Act. According to the Act: "[w]ithin one year from the date of the enactment of this Act, the Secretary shall enter into an agreement with the Commission to establish arrangements for review and consultation by the Commission with respect to the project . . . " WVDP Act, Sec. 2 (c).

An agreement (Memourandum of Understanding [MOU]) was entered into by the NRC and DOE in September of 1981. The MOU established the sequence of activities that would allow the NRC and DOE to consider a range of regulatory approaches potentially available to it in

NMSS01Public

establishing the criteria. This sequence was appropriately reflected in the NRC's SECY-98-251, which the DOE supported as consistent with the process established in the 1981 MOU.

As discussed in the enclosed comments, the sequence of agency action proposed in the draft decommissioning criteria appears to be inconsistent with the process outlined in the 1981 MOU. We are deeply concerned about the legal implications of this departure from the process established in the MOU, an agreement mandated by the WVDP Act.

In summary, it is the DOE's recommendation that the NRC withhold assigning the License Termination Rule (LTR) as the final Decontamination and Decommissioning (D&D) criteria for West Valley until the NRC has considered the site-specific environmental effects of license termination for the West Valley site. The DOE does not believe that the generic analyses in NUREG-0586 and NUREG-1496 adequately address the complex and unique environment, safety, and health issues such as those associated with decommissioning scenarios currently being evaluated for the WVDP and West Valley Site as a whole. The DOE has been and will continue to consider the LTR as draft criteria and use the LTR as the objective for pending Project completion decisions and accompanying analyses. However, the DOE believes that it is premature for the NRC to "prescribe" the LTR at this time without completion of the requisite site-specific National Environmental Policy Act (NEPA) analyses that are required of agencies undertaking a major Federal action. Instead, consistent with the sequence presented in SECY-98-251, the DOE believes that the most appropriate path forward would be for the NRC to finalize the D&D criteria following release of West Valley's Final Environmental Impact Statement (FEIS) but before issuance of the DOE's Record of Decision for Project completion.

DOE, therefore, requests that the Commissioners and the NRC staff consider revising the draft Policy Statement to identify the LTR as draft criteria, allowing the DOE and New York State Energy Research and Development Authority's (NYSERDA) Preferred Alternative and FEIS to be completed before prescribing final D&D criteria. The West Valley FEIS will contain the site-specific cumulative analysis of DOE and NYSERDA's Preferred Alternative as well as the analysis of the other alternatives that DOE and NYSERDA considered viable for Project completion and site closure or long-term management. In this way, the NRC is assured of having the most appropriate information and analyses to support its own decision-making process to prescribe D&D criteria for the West Valley Demonstration Project. This sequence of DOE/NRC actions is consistent with the process originally proposed in SECY-98-251, and is also consistent with the process outlined in the MOU between the DOE and NRC.

DOE remains dedicated to achieving the successful decommissioning of the WVDP, and appreciates the effort put forth by the NRC. The DOE intends to continue working closely with the NRC to facilitate resolution of our concerns and encourages the NRC to give the appropriate consideration to DOE's comments as it considers its next steps

in the process for prescribing D&D criteria for the WVDP. The DOE is looking forward to the opportunity to discuss our concerns with you and other members of the NRC in the near future.

Sincerely,

Barbara A. Mazurowski

Barbara A. Mazurowski, Director
West Valley Demonstration Project

cc: R. F. Ahern, DOE-HQ, GC-51, 6A-149/FORS, w/enc.
M. E. Rawlings, DOE-HQ, EM-31, 1188/CLOV, w/enc.
S. R. Brechbill, OH/OOM, OSE, Room 419, w/enc.
J. Ebersole, OH/CC, OSE, Room 416, w/enc.

Enclosure: DOE Comments

DWS:089 - 71263 - 451.5.2e

DWS/bma

DOE COMMENTS ON THE NRC DRAFT POLICY STATEMENT (SECY-99-232)

WEST VALLEY
DECONTAMINATION AND DECOMMISSIONING CRITERIA

Introduction

On December 3, 1999, the U.S. Nuclear Regulatory Commission (NRC) published a draft Policy Statement for establishing the decommissioning criteria for the West Valley Demonstration Project/West Valley site and conducted a public meeting on January 5, 2000, to discuss the draft criteria. Upon review of applicable documentation and of the U.S. Nuclear Regulatory Commission (NRC) staff's comments at the January 5 public meeting, the U.S. Department of Energy (DOE) finds a number of issues with the draft Policy Statement that need to be addressed. DOE's issues are both procedural and technical, but primarily revolve around the sequence of agency decision making actions reflected in NRC's draft Policy Statement.

Sequence of Agency Actions in Decision Making

The sequence of agency decision making actions and the National Environmental Policy Act (NEPA) analyses supporting those decisions are the fundamental questions underlying DOE's concerns with the NRC draft Policy Statement.

The DOE is concerned that by prescribing the License Termination Rule (LTR) before the NRC receives and reviews the DOE/NYSERDA Final Environmental Impact Statement (EIS), the NRC will be unnecessarily preempting and limiting the regulatory alternatives to be considered for West Valley. The NRC may indicate at this time that the LTR is the preferred approach it would like to use, and the DOE will continue to use the LTR in its planning and decision making, in its role as a lead agency, for the West Valley EIS. However, without the site-specific detailed analyses currently being assessed in the DOE/NYSERDA EIS, DOE believes that the analyses in NRC's existing Generic EISs are not adequate for determining the most appropriate decommissioning and licensing actions for West Valley at this time.

This concern was shared by two of NRC's five commissioners as part of the Commission vote on SECY-99-057. In their written comments on SECY-99-057[1], Chairman Jackson and Commissioner Merrifield both recognized the limitations of the GEIS[2] to support NRC decision making for West Valley and the importance of ensuring that NRC withhold prescribing the LTR until after the DOE issues its Final EIS.

---

[1]Commission Voting Record, "Supplement to SECY-98-251, Decommissioning Criteria for West Valley," June 3, 1999.

[2]U.S. Nuclear Regulatory Commission, "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities," NUREG-1496, July 1997.

Commissioner Merrifield wrote:

"I approve issuance of the criteria in SECY-98-251 as proposed criteria, with the final criteria to be prescribed after issuance of the final Environmental Impact Statement (EIS), but before the Record-of-Decision. Essentially, this decision reflects a desire to maintain the provisions of the NRC License Termination Rule but recognizes that there may be unique aspects of this site the NRC should consider before prescribing the final decommissioning criteria."

Chairman Jackson wrote:

"I approve prescription of the original broad criteria presented in SECY-98-251, with the final criteria to be prescribed after issuance of the final Environmental Impact Statement (EIS), but before the record of decision . . . the GEIS for the LTR did not consider a situation representative of West Valley. Therefore, the additional NEPA support provided by the ongoing EIS process appears necessary to guide the NRC prescription of the criteria."

Commissioner Merrifield and Chairman Jackson's comments further illustrate the DOE's concern that the NRC will need site-specific analyses and data to make the determination on decommissioning criteria for the West Valley Demonstration Project and West Valley site. That data and analyses would come from the West Valley Final EIS. Both Commissioners identified valid concerns with the adequacy of the NRC's analyses performed to date, especially in light of site-specific issues unique to West Valley, and identified the need to consider West Valley's Final EIS before prescribing the criteria.

The draft Policy Statement, however, does not reflect the need for the Final EIS prior to establishing the criteria. At the public meeting held in West Valley on January 5, 2000, the NRC staff assured one questioner that although the NRC had described a two-step process in the draft Policy Statement, there would be no change in criteria between the two steps. The second step was described simply as a "verification" step – to make sure that the DOE and NYSERDA are "within the license termination rule." The NRC would then "prescribe the specific criteria that are embodied within the range of the license termination rule."[3]

This statement would indicate that the site-specific analyses that have been performed to date and that are being developed for the DOE/NYSERDA Final EIS will not result in the NRC considering any decommissioning criteria outside of those necessary to eventually terminate the license at West Valley. To support that approach, the NRC will be relying on their own existing Generic Environmental Impact Statement (GEIS) analyses for applying the LTR to West Valley before site-specific analyses are completed.

DOE/NRC Memorandum of Understanding for the Decommissioning Process

The guidelines for the sequence of decisionmaking to prescribe the Decontamination and Decommissioning (D&D) criteria were instituted at the inception of the WVDP. As required under the WVDP Act, the DOE and NRC developed a Memorandum of Understanding (MOU)[4]

---

[3]Nuclear Regulatory Commission, West Valley Public Meeting NRC Transcript, Wednesday, January 5, 2000, Page 73, Lines 7 - 15.

[4]"West Valley Demonstration Project Memorandum of Understanding between the U.S. Department of Energy and the Nuclear Regulatory Commission," September 23, 1981.

in 1981 to establish the procedures for the NRC review and consultation with respect to DOE's activities under the West Valley Demonstration Project (WVDP) Act. The MOU encompassed the entire Project, including the decontamination and decommissioning activities as described in the WVDP Act.

Sections III.B.4 (a), (b), and (c) of the MOU describe the process for establishing D&D criteria for the WVDP:

(a) "The Department [DOE] will perform an analysis of impacts and risks of potential disposition modes for the tanks and other facilities . . . The NRC and Department project managers will consult on requirements and disposition modes to be analyzed"

(b) "Upon receipt of the Department analysis, the NRC will prescribe decontamination and decommissioning (D&D) requirements in accordance with the Act."

(c) "The Department will prepare a Project Decommissioning Plan which includes a description of engineering and operating activities to be performed. This plan will be reviewed by the NRC and comments provided to the Department. The Department will review and consider the comments provided prior to initiation of D&D operations."

The MOU established the sequence of activities that would allow the NRC to consider a range of regulatory approaches potentially available to it in establishing the criteria. This sequence was appropriately reflected in SECY-98-251, which the DOE supported as consistent with the process established in the 1981 MOU.

However, the draft Policy Statement's two-step process of prescribing the LTR as the decommissioning criteria before receipt of the DOE's Final EIS "analysis of impacts and risks of potential disposition modes for the tanks and other facilities" conflicts with the MOU and prematurely limits the range of closure options available to the DOE. The MOU established the decommissioning criteria prescription process sequence to allow DOE to analyze a reasonable range of alternatives for a site as unique as West Valley. The DOE does not understand why the NRC has deviated from this forward path at this point in the West Valley EIS process.

The DOE's concern with the NRC's deviation from the MOU sequence of Project completion activities also involves another statement made in the draft Policy Statement. The Environmental Analysis section of the draft Policy Statement indicates that "the DOE is developing a decommissioning plan and is responsible for its preparation and implementation." Section III.B.4.(c) of the MOU identifies DOE's preparation of a "Project Decommissioning Plan" as a DOE requirement. However, the decommissioning plan is to be prepared after (a) DOE performs an "analysis of impacts and risks of potential disposition modes for the tanks and other facilities at the Center" and then (b) upon receipt of the DOE analysis, the NRC will prescribe decontamination and decommissioning criteria. The DOE is preparing an EIS, and is not yet preparing a decommissioning plan: DOE's activities under III.B.4(a) of the MOU have not yet been completed.

U.S. Nuclear Regulatory Commission NEPA Actions

In an effort to help the NRC meet its own NEPA needs as a cooperating agency in the DOE/NYSERDA EIS, the DOE has involved the NRC in much of the working-level activity that has been ongoing over the past several years. This provided the NRC with detailed knowledge of current site conditions and issues related to the EIS and to the DOE's and NYSERDA's decision making responsibilities. The DOE believed that this degree of familiarity would be important for the NRC's related federal action of prescribing D&D criteria. The DOE expected that after completion of the West Valley Final EIS, the NRC would conduct its own independent NEPA review and adopt some or all of the site-specific West Valley EIS into an NRC NEPA document supporting the NRC's decision making for the West Valley D&D criteria.

As a result of the NRC's proposed decision to prescribe the LTR prior to the receipt of the DOE Final EIS, the DOE is uncertain regarding NRC's intended NEPA process. There also appears to be some inconsistency between the NRC NEPA process described in the Final License Termination Rule and the process the NRC described in the draft Policy Statement for West Valley. The DOE, therefore, requests that the NRC revise the draft Policy Statement to detail the NEPA process under 10 CFR 51 that the NRC is following in making its decommissioning policy decision.

Section VI of the NRC's Final License Termination Rule (62 FR 39086) specifically identifies the relationship between the GEIS that supports the LTR (NUREG-1496) and site-specific decommissioning actions. In this section, the NRC indicates that there would be two categories of licensees seeking decommissioning: sites where licensed operations have been limited to the use of small quantities of short-lived radioactive materials or radioactive materials in sealed sources, and all other licensees. Decommissioning for licensees with small quantities of short-lived radioactive materials or radioactive materials in sealed sources is categorically excluded from the Commission's environmental review process (10 CFR 51.22); this exclusion clearly does not apply to West Valley. For every other licensee, the Final Rule states that "the Commission will still initiate an environmental assessment regarding any particular site, for which a categorical exclusion is not applicable, to determine if the generic analysis [in the GEIS] encompasses the range of environmental impacts at that particular site."

The DOE believes that this environmental assessment (10 CFR 51.30) would be an NRC NEPA document, prepared by the NRC, for the specific purpose of verifying that the site-specific application of the LTR is covered under the generic EIS analysis. The draft Policy Statement makes no mention of this NRC action. In fact, the December 3, 1999 draft Policy Statement's section on Environmental Analysis indicates that:

> "The NRC does not anticipate the need to prepare its own duplicative EIS as the NRC can consider the environmental impacts described in the DOE/NYSERDA EIS in approving the particular decommissioning criteria of the WVDP under the LTR. Under this arrangement, the DOE/NYSERDA EIS will fulfil the NEPA responsibilities for the NRC."

It is unclear how the NRC anticipates that the DOE/NYSERDA EIS will fulfill the NEPA responsibilities for the NRC when, as a a cooperating agency with jurisdiction by law, the NRC has an independent legal obligation to comply with NEPA. When adopting another agency's EIS, an agency needs to meet the prescriptions found in Environmental Quality's (CEQ) NEPA regulations at 40 CFR 1506.3. These regulations indicate specific findings that must be made by the adopting agency and prescribe circumstances under which recirculating of the EIS is required. Further, for the NRC to rely on the DOE/NYSERDA Final EIS, it is axiomatic that it must exist in the first instance. Mandatory NEPA procedures require either the issuance of a Final EIS, or a finding that an EIS is not required, prior to agency decision making. See 40 CFR 1506.1; see also 40 CFR 1508.18(b)(1) (adoption of official policy , such as rules, regulations, and interpretations adopted pursuant to the APA are "federal actions" under NEPA).

If the NRC does not consider its individual decommissioning criteria decision at West Valley to be a major federal action (10 CFR 51.20), the draft Policy Statement should specifically state the reasons for that conclusion or alternatively, should indicate that the NRC will prepare its own environmental assessment as required in the LTR Final Rule (62 FR 39086). The NRC should also include in a revised draft Policy Statement the schedule, scope, alternatives to be considered, cooperating agencies, and the extent of public involvement including other interested regulatory agencies in this environmental assessment.

The revised draft Policy Statement should also indicate that the D&D criteria will be draft criteria until, as required under the LTR's Final Rule, the NRC has completed its environmental assessment to "determine if the generic analysis encompasses the range of environmental impacts at that site," then " the appropriate NRC staff director will determine whether to prepare an environmental impact statement or a finding of no significant impact on the proposed action" (10 CFR 51.31). If, on the other hand, the NRC does not believe it is necessary to follow the NEPA process described in its Final Rule and 10 CFR Part 51, then the draft Policy Statement should clarify the rationale for not following the process and explain what process will be followed.

U.S. Nuclear Regulatory Commission Cooperating Agency Status

As noted above, the DOE has included the NRC in discussions and reviews of ongoing EIS-related work to ensure that the NRC is aware of the site-specific issues facing West Valley. When the NRC proposed to the DOE in 1991 that the NRC become a cooperating agency on the West Valley EIS, the NRC stated that:

> "It has become clear to all, in light of the uniqueness and technical complexity of the situation at West Valley, that the closest possible coordination between the Project and NRC on the establishment of decontamination and decommissioning requirements is desirable. We propose that the most efficient way of ensuring close coordination would be for NRC to be designated as a cooperating Federal agency for the site closure EIS.
>
> The purpose of such a designation [NRC as cooperating agency] would be to emphasize that NRC's prescription of decontamination and decommissioning

criteria will be coordinated with the EIS process already established by the DOE and NYSERDA, and to tie our participation firmly into your schedule for the EIS. The scope of NRC's participation as a cooperating agency would be focused upon one issue: prescription of decontamination and decommissioning criteria."[5]

The DOE welcomed NRC's participation as a cooperating agency, stating that:

> "NRC's participation as a cooperating agency, pursuant to Section 1501.6 of the Council on Environmental Quality (CEQ) regulations, will not only be very beneficial to DOE; but we believe your participation will also benefit NRC in carrying out its responsibilities under both the West Valley Demonstration Project Act and the Memorandum of Understanding between the DOE and NRC."[6]

The DOE has been moving through the West Valley EIS process, and has continued to involve NRC through bi-weekly conference calls and sharing of the technical aspects of the EIS analysis. The site-specific analyses being performed as part of the West Valley EIS process, as well as the enhanced interagency communication, were intended to support the NRC in carrying out its responsibilities under the WVDP Act and MOU. However, the current process being followed indicates that the NRC is basing its LTR decommissioning process on generic (non-site-specific) analyses it has previously performed (known as Generic Environmental Impact Statements) rather than on the site-specific analyses that are currently being developed as part of the West Valley EIS process.

Summary of Existing NRC Analyses

The NRC has promulgated two major rules addressing the decommissioning of licensed nuclear facilities, both of which were supported by GEIS. The first of these rules, promulgated in 1988 for decommissioning nuclear facilities, was supported by NUREG-0586[7], and covered decommissioning alternatives, financial assurance, and planning. The more recent 1997 rule on radiological criteria for decommissioning and license termination of NRC-licensed facilities was supported by NUREG-1496[8].

---

[5]Letter, C. J. Haughney, NRC, to T. J. Rowland, DOE, January 30, 1991.

[6]Letter, T. J. Rowland to C. J. Haughney, "West Valley Demonstration Project Closure Environmental Impact Statement (EIS)", PVL:012:91 - 0259:91:08, April 25, 1991.

[7] U.S. Nuclear Regulatory Commission. August 1988. Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities. NUREG-0586. Washington, D.C.

[8] U.S. Nuclear Regulatory Commission. July 1997. Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities. NUREG-1496. Washington D.C.

In the draft Policy Statement (SECY-99-232), the NRC has stated its intent to apply the 1997 License Termination Rule (LTR) as the decommissioning criteria for West Valley[9] before DOE/NYSERDA issue their final EIS and without the benefit of a site-specific NEPA review by the NRC to support that decision. The DOE believes that the NRC's generic EISs do not sufficiently consider the potential impacts of decontaminating and decommissioning a site such as West Valley and that these generic EISs alone may not be technically adequate to support establishing the D&D criteria for the facilities covered under NRC License CSF-1.

NUREG-1496 Analysis

Specifically, the DOE believes that the generic analysis in NUREG-1496, prepared to support promulgation of the 1997 License Termination Rule, does not encompass the range of possible environmental impacts that could be experienced at the West Valley site. The first sentence of the Environmental Analysis section of the NRC's draft Policy Statement says the following: "The environmental impact of applying the LTR to NRC licensees was evaluated in a Generic Environmental Impact Statement (GEIS, NUREG-1496) that supports the LTR." This statement does not acknowledge that the analysis in the GEIS was not comprehensive for all NRC licensees. In fact, Section 7.2.2, "Summary of Results," of NUREG-1496 clearly states that:

> "Based on the analysis of Chapters 1 - 6 of this final GEIS, for the very large majority of NRC licensed sites (>6000), it continues to be reasonable to envision that the unrestricted and/or restricted use regulatory alternatives analyzed here will provide appropriate and achievable criteria for decommissioning. Nevertheless, it is also reasonable to continue to anticipate that there may be certain difficult sites that present unique decommissioning problems, not analyzed in this final GEIS because of their specific situation, which need particular analysis and for which the public health and safety may best be protected by alternate means." (emphasis added)

However, the NRC staff discussion at the January 5, 2000 West Valley public meeting also did not acknowledge the limited breadth of the GEIS analysis and led those attending to believe that the GEIS was adequate for all NRC licensees. The NRC staff indicated:

> "The NRC's license termination rule was promulgated recently, 1997. It is a rulemaking that is meant to cover all of NRC's licensees and NRC licenses everything from nuclear power plants to individual users of small quantities of nuclear material. Because of the wide range of activities that NRC licenses, and from previous experiences from decommissioning, when this rulemaking was being worked on we knew that we would need a range of options in

---

[9] NRC's draft Policy Statement says *"under the Authority of the WVDP Act the Commission is prescribing NRC's LTR as the decontamination and decommissioning criteria for the WVDP."* Furthermore, it states that *"NRC will apply the criteria in the LTR to the NRC-licensed radioactive waste disposal area (NDA) within the WVDP site boundary since the NDA is under the NRC jurisdiction."*

decommissioning in order to be able to fulfill all of the different types of possibilities that are related to decommissioning a site."[10] (emphasis added)

The GEIS analysis, however, was clearly limited and examined only fuel-cycle facilities (power, test, and research reactors; uranium fuel fabrication plants; uranium hexafluoride conversion facilities; and independent spent fuel storage installations) and non-fuel cycle facilities (sealed source manufacturers, research and development laboratories, and rare metal refineries). It did not assess a spent nuclear fuel reprocessing facility. It also provided no analyses, impact assessment, or cost-benefit analyses for terminating the license for a high-activity disposal facility similar to the NRC-Licensed Disposal Area (NDA).

The facilities at West Valley represent unique radionuclide inventories in configurations that were not considered in the GEIS. For example, key GEIS analyses ("Human Health Impacts," "Major Costs of Decommissioning," and "Comparison of Impacts and Costs") are based on four radioactive isotopes (Co-60, Cs-137, U-nat, and Th-232). The DOE/NYSERDA EIS analysis, however, considers 30 nuclides including C-14, Sr-90, Tc-99, I-129, Cs-137, Eu-154, Np-237, Pu-238/239/240/241, Cu-243/244, and U-232/233/234/235/ and 238. The extent of site-specific analysis is critical to what NEPA requires of federal agencies in taking a "hard look" before decision making. The mobility and bioavailability of these isotopes have important implications for the analysis of restricted or unrestricted site release decisions.

While a generally applicable decommissioning standard is desirable from an NRC resource perspective, and while its development and promulgation has been an NRC objective for several years, the NRC has established a precedent for considering complex or unique sites on a site-by-site basis, and this precedent is also acknowledged in the Final Rule. The Final Rule's Section A.2.2.3 (62 FR 39864), "Cost and Practicality of Standard," indicates that:

> "The level of soil contamination for the large majority of NRC-licensed facilities (>6000) is either zero or minimal . . . Certain facilities (e.g., power reactors, fuel facilities, industrial facilities) may have greater soil contamination, and certain of these facilities have been identified as having extensive soil contamination (albeit generally at relatively low levels) and have been placed on the Site Decommissioning Management Plan (SDMP) (see NUREG-1444, October 1993). These sites warrant specific NRC attention regarding their decommissioning." (emphasis added)

The Final Rule GEIS (Section 4.3.3.1; NUREG 1496) also acknowledges that these SDMP sites "warrant special attention" outside of the context of the LTR. These facilities were recognized as being outside the scope of examination in the GEIS because the complexities associated with their individual situations would need site-specific evaluations and could not be adequately examined under the generic EIS.

---

[10]Nuclear Regulatory Commission, West Valley Public Meeting NRC Transcript, January 5, 2000, Page 11, Lines 22 through 25, and Page 12, Lines 1 through 7.

West Valley shares many of the same characteristics that led the NRC to exclude the SDMP facilities from the GEIS due to their site-specific complexities, including soil contamination and a plume of contaminated groundwater. The DOE does not understand why the NRC would find the GEIS analyses applicable to West Valley when other sites with site-specific complexities comparable to West Valley were excluded from the GEIS analysis. The GEIS acknowledges that:

> "The preamble to the proposed rule (59 FR 43200) discusses the fact that there may be several existing licensed sites where the health and the environment may be protected by means other than the decommissioning activities analyzed in Chapters 1-6 . . . it is also reasonable to continue to anticipate that there may be certain difficult sites that present unique decommissioning problems, not analyzed in this final GEIS because of their site-specific situation, which need particular analysis and for which the public health and safety may be best protected by alternate means."

The DOE believes that West Valley presents "unique decommissioning problems" that may be best "protected by means other than the decommissioning activities analyzed in Chapters 1-6 [of the GEIS]."

NUREG-0586 Analysis

The DOE believes that the analysis in NUREG-0586 is also insufficient to support establishing the D&D criteria without the benefit of the final West Valley site-specific EIS. The final GEIS, prepared in 1988 to support the Decommissioning Rule, analyzed a number of reference licensed facilities, including a next-generation spent fuel reprocessing facility (based on the never-demonstrated Barnwell design).

As indicated in Attachment A, the anticipated impacts of decommissioning the Barnwell spent fuel reprocessing plant design are demonstrably underestimated when compared to the unrestricted release alternative in the DOE/NYSERDA draft EIS, which is based on actual post-fuel-reprocessing radiological and site characterization data. Comparisons of West Valley's anticipated impacts to those postulated for Barnwell, including occupational and public exposure from waste transportation (22x and 199x more, respectively), non-TRU waste volumes (42x more), and cost for implementation (21x more), are orders of magnitude greater in the DOE/NYSERDA draft EIS than in NUREG-0586.

Applicability of the LTR to the NRC-Licensed Disposal Area

The DOE believes that the NDA, in particular, is a primary example of why the NRC should await publication of the DOE's Final EIS before prescribing D&D criteria. In the NRC's draft Policy Statement, NRC states that – as required under the WVDP Act – it intends to apply the License Termination Rule to the facilities used in carrying out the WVDP as well as to the

NDA[11]. This seems to indicate NRC's desire to achieve regulatory consistency for both WVDP facilities and the NDA; however, the DOE has already publicly stated that it does not believe the NDA can satisfy the criteria of the LTR unless the NDA is exhumed[12]. The decision whether to engage in the exhumation of the NDA would clearly require extensive analysis as is currently being performed for the West Valley FEIS. Finalizing the LTR as the D&D criteria without the site-specific analyses may well eliminate consideration of alternatives that are most protective of the public, which may include long-term monitoring and maintenance with institutional controls.

Section C.3.2 of the Final Rule (62 FR 39074), also specifically addresses the applicability of the LTR to disposal facilities such as the NDA. The Final License Termination Rule states that:

> "With regard to the burials, the determination of whether the licensee meets the radiological criteria of the final rule includes consideration of all residual radioactivity at the site, including burials made in conformance with 10 CFR Part 20 (both existing Part 20.2002 and formerly used Parts 20.302 and 20.304) . . . For past burials that have involved long-lived nuclides, site-specific modeling may also justify leaving these burials in place. Thus, the Commission sees no reason to specifically exempt these burials from consideration under this final rule but <u>would continue to require an analysis of site-specific overall impacts and costs in deciding whether or not exhumation of previous buried waste is necessary for specific sites</u>. " (emphasis added)

The stated need for site-specific analyses for Part 20.2002 (and former Part 20.302) disposal facilities indicates that the GEIS analyses did not encompass the range of environmental impacts associated with waste disposal facilities at West Valley.

The NRC-Licensed Disposal Area was sited, developed, and operated by Nuclear Fuel Services under the approved Technical Specifications of Provisional Operating License CSF-1. The operation of the NDA was authorized pursuant to the Atomic Energy Act of 1954 (as amended) and Title 10, CFR, Parts 20, 30, 40, and 70, to "dispose of solid radioactive waste generated in the operation of the facility by burial in the soil in accordance with the technical specifications." Technical Specifications 4.13.1 through 4.13.4 of Provisional Operating License CSF-1 define the procedures for solid waste burial in the NDA. Specifically, operation of the NDA was authorized under 10 CFR 20.302 (which was revised in 1991 to become 10 CFR 20.2002). As part of the application for licenses, the New York State Atomic Research and Development Authority amended its license application with additional documentation[13] to provide assurance to the AEC of NYS's commitment to proper maintenance of the burial site "in perpetuity." NFS

---

[11]"Decommissioning Criteria for the West Valley Demonstration Project (M-32) and West Valley Site; Draft Policy Statement and Notice of Public Meeting," Federal Register Volume 64, Number 232, December 3, 1999.

[12]Holland, M. to Citizen Task Force, Summary of July 14, 1999, Task Force Meeting, July 23, 1999.

[13]Townsend, O., NYARDA, to Lowenstein, R., AEC, "Nuclear Fuel Services Inc., et al., Application for Licenses, AEC Docket No. 50-201," April 8, 1963.

used the NDA to dispose approximately 163,000 cubic feet of high-activity waste generated by fuel reprocessing operations.

After the West Valley Demonstration Project Act was passed and the DOE assumed control of the Project premises, the DOE used an undisturbed portion of the NDA for disposals associated with carrying out the WVDP. The Congressional testimony and legislative history associated with development and passage of the WVDP Act[14,15] indicate that disposal of WVDP wastes onsite had been expected by Congress. Although the NDA was considered part of the Project Premises for the conduct of the WVDP, and was therefore under DOE's control[16], Congress expected that the NDA and the adjacent State-Licensed Disposal Area (SDA) would "remain under the exclusive jurisdiction and control of the licensees." DOE disposed of approximately 200,000 cubic feet of low-level waste in the NDA during WVDP burial operations.

It appears to the DOE, given the background, intent, and scope of the WVDP Act; documented agreements and statements made relative to the CSF-1 license; the NRC's own language in the GEIS that supports the LTR; and decisions made at facilities posing comparable risks to public health and safety, that removal of such a disposal ground is without precedent and needs to be subject to a site-specific analysis prior to establishment of decommissioning criteria. There is no experience or precedent for such an action at other even more problematic disposal sites where, in fact, long-term monitoring and maintenance has been the remedy selected for protection of public health and safety. The Maxey Flats site in eastern Kentucky is a primary example of disposal ground long-term monitoring and maintenance under EPA's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provisions.

The DOE expects that long-term responsibility for the NDA will ultimately return to NYSERDA upon completion of DOE decommissioning actions identified in the WVDP Act, as the most appropriate means of ensuring ongoing protection of public health and safety through appropriate monitoring. There are several regulatory pathways for accomplishing this licensing action, including the use of 10 CFR 20.2002, which the NRC has acknowledged as a viable option in previous correspondence

Cumulative Assessment of the NRC-Licensed Disposal Area and the State-Licensed Disposal Area

Initial cost-benefit analyses performed in support of West Valley EIS decisionmaking indicate that the most appropriate actions for some of the West Valley facilities may be long-term management. For example, DOE believes that the most appropriate near-term option for the NDA and SDA would be continuation of in-place monitoring and maintenance as part of a long-term institutional control program.

---

[14]Congressional Record - House, H 8767, 8768, (Rep. Dingell) September 15, 1980.

[15]House Report No. 96-1100 (II), Congressional Record Vol. 126, at 6041, 1980.

[16]"Cooperative Agreement Between United States Department of Energy and New York State Energy Research and Development Authority on the Western New York Nuclear Service Center at West Valley, NY," October 1, 1980

The NRC has indicated that the site must be evaluated cumulatively in the West Valley performance assessment. This presumably would include an evaluation of performance, assuming that institutional controls fail. It is unclear to DOE how this cumulative analysis should be performed and how the outcome may or may not preclude selection of what cost/benefit analyses indicate to be a reasonable and appropriate management option. The DOE requests that the NRC revise the draft Policy Statement to clearly define how the analyses should be conducted.

The DOE is particularly interested in the assumptions that should be used concerning institutional controls for the disposal areas (both for the NDA and SDA), and the basis for these assumptions from existing NEPA analyses. DOE is also interested in the NRC's interpretation on how the disposal areas, as part of a cumulative performance assessment, are required to be considered by the DOE in its decisionmaking for the West Valley Demonstration Project, and how Project facilities and the NDA factor into NYSERDA's and NYSDEC's responsibilities for evaluation and decisionmaking for the SDA. Clarification of these relationships should also be specifically addressed in the NRC Policy Statement.

Conclusion and Recommendations

Based on the preceding discussion, it is the DOE's recommendation that the NRC withhold assigning the LTR as the final D&D criteria for West Valley until NRC has considered the site-specific environmental effects of license termination for the West Valley site. DOE does not believe that the generic analyses in NUREG-0586 and NUREG-1496 adequately address the complex and unique environment, safety, and health issues such as those associated with decommissioning scenarios currently being evaluated for the West Valley Demonstration Project and West Valley site as a whole. The DOE has been and will continue to consider the LTR as draft criteria and use the LTR as the objective for pending Project completion decisions and accompanying analyses. However, DOE believes that it is premature for the NRC to "prescribe" the LTR at this time without completion of the requisite site-specific NEPA analyses that are required of agencies undertaking a major Federal action.

The DOE, therefore, requests that the Commissioners and the NRC staff consider revising the draft Policy Statement to identify the LTR as draft criteria, allowing the DOE and NYSERDA's Preferred Alternative and Final Environmental Impact Statement to be completed before prescribing final decontamination and decommissioning criteria. The West Valley FEIS will contain the site-specific cumulative analysis of DOE and NYSERDA's Preferred Alternative as well as the analysis of the other alternatives that DOE and NYSERDA considered viable for Project completion and site closure or long-term management. In this way, the NRC is assured of having the most appropriate information and analyses to support its own decision making process to prescribe D&D criteria for the West Valley Demonstration Project. This sequence of DOE/NRC actions is consistent with the process originally proposed in SECY-98-251, and is also consistent with the process outlined in the MOU between the DOE and NRC. Consistent with the sequence presented in SECY-98-251, the DOE believes that the most appropriate path forward would be for the NRC to finalize the D&D criteria following release of West Valley's Final EIS but before issuance of the DOE's Record of Decision for Project completion.

The DOE also requests that the NRC revise the draft Policy Statement to specify the actual NEPA process (under 10 CFR part 51) it intends to implement for making its decision on D&D criteria prescription. Since the NRC is also a cooperating agency on the West Valley EIS, it is in the best interest of the dual lead agencies, as well as the NRC, to understand the potential scope, schedule, and budget implications of NRC's criteria prescription process, and to fully understand how all the agencies will fulfil their NEPA obligations.

ATTACHMENT A
Comparison of Decommissioning a Fuel Reprocessing Plant (FRP) in NRC's NUREG-0586 with DOE/NYSERDA Alternative I (Removal and Release to Allow Unrestricted Use)[17]

	FRP DECON (NUREG-0586)[18]	Alternative I (DOE/EIS-0226)[19]	Difference
Occupational Exposure (person-rem)			
Decontamination	512	1,185	2.3 x
Transportation	20	440	22 x
Public Exposure (person-rem)			
Decontamination	10	55.8	5.58 x
Transportation	9	1,796	199.6 x
Waste Volumes (m^3)			
TRU	4,600	5,060[20]	1.1 x
Non TRU	3,100	130,718	42 x
No. of Containers	5,700	43,480	7.6 x
No. of Shipments	340	13,644	40 x
Cost for Implementation[21]	$ 241,900,000	$ 5,152,820,000	21.3 x

[17] Waste Management Area 8 (New York State-licensed Disposal Area) contributions not included as NRC does not regulate actions at the SDA.

[18] U.S. Nuclear Regulatory Commission. August 1988. Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities. NUREG-0586. Washington, D.C.

[19] U.S. Department of Energy. January 1996. Draft Environmental Impact Statement for Completion of the West Valley Demonstration Project and Closure or Long-Term Management of Facilities at the Western New York Nuclear Service Center. DOE/EIS-0226. Washington, D.C.

[20] TRU waste volumes based on the most recent waste volume estimates from revised Closure Engineering Reports.

[21] Costs in NUREG-0586 inflated by Consumer Price Index change from 1986 to 1996 dollars.