POLICY ISSUE
(Information)

February 9, 1988

SECY-88-39

For: The Commissioners

From: Victor Stello, Jr.
Executive Director for Operations

Subject: THIRD QUARTERLY PROGRESS REPORT ON THE PRE-LICENSING PHASE OF THE DEPARTMENT OF ENERGY'S (DOE'S) CIVILIAN HIGH-LEVEL RADIOACTIVE WASTE MANAGEMENT PROGRAM

Purpose: To provide the Commission with the third quarterly progress report on the pre-licensing phase of DOE's Civilian High-Level Radioactive Waste Management Program.

Executive Summary: In the previous two quarterly progress reports (SECY-87-137 and SECY-87-267) on the pre-licensing phase of DOE's Civilian High-Level Radioactive Waste Management Program, the Nuclear Regulatory Commission (NRC) staff discussed seven action items that cover the key aspects of the NRC/DOE pre-licensing consultation program. They were: (1) implementation, by DOE, of scheduled and systematic consultations; (2) development of an information retrieval system; (3) early implementation of a quality assurance program; (4) early establishment of repository design parameters; (5) early resolution of State and Tribal concerns; (6) adoption of conservatism; and (7) early resolution of issues through a program of Licensing Topical Reports and other mechanisms. This report also will focus on these items, thereby providing the Commission with the NRC staff perspective on the progress of DOE's repository program in areas important to an effective NRC high-level waste program.

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These areas are considered by the NRC staff to be critical to ensuring NRC can meet the statutory time limit of three years to act on DOE's application to construct the repository.

The most significant change in the status of the repository program, in this quarter, was the passage of legislation, on the high-level waste program, called the "Nuclear Waste Policy Amendments Act of 1987." This Act changes the national high-level waste program, and, consequently, DOE's and NRC's programs, considerably. However, NRC is still required to issue a final decision approving or disapproving the issuance of a construction authorization not later than three years after the date of the submission of such an application.

The following summarizes the legislation's most important impacts on the high-level waste repository program:

a) The Yucca Mountain site in Nevada has been named as the only site that DOE is to characterize. The siting activities now underway in Deaf Smith, Texas and Hanford, Washington are to be phased out within 90 days after passage of the Act.

b) The legislation provides for no specific back-up for the Yucca Mountain site, although a Negotiator will be appointed to find a State or Indian Tribe willing to host a repository at a technically qualified site.

c) Benefits will be provided to States or Indian Tribes agreeing to host the repository (i.e., $10 million per year during site characterization activities at the repository, and $20 million annually, after fuel acceptance at the repository).

A more detailed analysis of the Act and the impact on the high-level waste repository program is being developed by the Office of the General Counsel (GC) and will be available by mid-February 1988.

Another item of significance is that DOE transmitted the consultation draft of the site characterization plan (CDSCP) for the Yucca Mountain site, to the State of Nevada and NRC, on January 8, 1988. The CDSCP is not required by the Act or its amendments. However, DOE has chosen to issue the CDSCP

for NRC and State of Nevada review and consultation, so that NRC and State comments can be considered in DOE's development of the Site Characterization Plan (SCP) required by the Act and 10 CFR Part 60.

In the area of interactions between DOE and NRC, it has been difficult to get DOE to focus on and conduct meetings with the NRC staff during preparation of the CDSCP. This has been a continuing problem in the repository program. When DOE is preparing to release a major document, DOE staff prefers not to have any significant technical interactions with the NRC staff. Likewise, NRC staff, after receipt of a major DOE document for review, has not been able to meet with DOE on significant technical matters. This situation has made it difficult to conduct timely and meaningful interactions with DOE. Since the Act has reduced the sites to be characterized from three to one, this change should allow both DOE and NRC to better focus their staff activities. This change will allow the NRC to conduct simultaneous activities through the use of different staff members (e.g., major document reviews, on-site technical reviews, and technical meetings on the repository program).

Discussion: The current status of the seven action items that NRC staff use as performance indicators to assess progress in the high-level waste repository program is given below.

1. Implementation by DOE of Scheduled and Systematic Consultations

The CDSCP for the Yucca Mountain site in Nevada probably will be the major focus of interactions between NRC and DOE, over the near-term. The NRC staff has completed the acceptance review of DOE's CDSCP, using criteria in the Division of High-Level Waste Management's (DHLWM's) Site Characterization Review Plan. Although the overall document is acceptable for review, considering that it is a consultation draft, there are major omissions that would be the basis for not accepting the Final SCP. Most of the omissions are related to exploratory shaft construction and testing. The staff considers that adequate material is available in most technical areas to allow a substantive review and that our comments at this stage should contribute to an improved statutory SCP.

DOE has proposed workshops on the CDSCP with NRC and the State of Nevada. Its proposal included a plenary meeting scheduled for January 28 and 29, 1988, in Reno, Nevada, to provide overview information on the CDSCP and to establish schedules and agendas for future technical workshops. Although NRC will be participating in the plenary meeting, NRC staff has informed DOE that the need for technical workshops cannot be determined until mid-February 1988 and will be based on the significance of the staff's comments on the CDSCP, as well as the ability to establish, with DOE substantive technical exchange on NRC's comments. NRC plans to have representatives at any DOE-State of Nevada workshops.

Although the CDSCP provides a comprehensive discussion of DOE's planned activities at the site, at a general level, study plans will provide actual details on the implementation of the plans in the SCP. The NRC staff has requested a schedule for issuance of study plans and start of work for studies at the Yucca Mountain site. DOE is currently reprioritizing its schedule and has committed to provide the revised schedule to the staff by early February. Also, DOE committed to provide NRC with the first study plans by mid-February, 1988.

The NRC/DOE consultations for the period of October through December 1987 are as follows: DOE was preparing to issue the CDSCP by January 8, 1988, and the NRC staff was preparing a technical review plan for the CDSCP. Consequently, there were no formal meetings between the NRC staff and the DOE's Nevada Nuclear Waste Storage Investigations (NNWSI) Project. One NRC/DOE generic technical meeting on Issues Hierarchy and Issue Resolution Strategy was held on October 8-9, 1987.

The NRC staff is in the process of setting up, with DOE, a technical review of seismic monitoring at the Yucca Mountain site, tentatively scheduled for the week of February 29, 1988. We are also considering reviews in other areas of ongoing data collection, such as meteorology and water-level monitoring.

As discussed in the Executive Summary, the decision to reduce the number of sites to be characterized from three to one will allow NRC staff to conduct more simultaneous activities. This will allow more technical interactions with DOE. Furthermore,

comment on the CDSCP and study plans could provide both a stimulus and focus for such interactions.

2. Development of an Information Retrieval System:

DOE's contractor for the licensing support system (LSS), Science Application International Corporation (SAIC), is currently working on several task areas concerning development of the LSS. These areas are: (1) support for the Negotiated Rulemaking, to ensure that any results from the Negotiated Rulemaking are factored into the LSS; (2) a preliminary needs analysis, to identify the initial design requirements for the system; (3) development of a statement of work as a prototype to answer technical questions on the system; and (4) a cost benefit analysis for submission to the Office of Management and Budget. DOE has opened up the technical reviews on status of this contract to all participants in the Negotiated Rulemaking. The Negotiated Rulemaking will determine the nature and scope of the LSS, and specific requirements that will lead to a system design.

Recent legislation amending the Nuclear Waste Policy Act (NWPA) may require changes in the direction given to the Negotiating Committee. The NRC has canceled the previously scheduled January 25-26, 1988 meeting to allow the staff to assess the impact of this legislation on the operation of the Committee. An information paper on this subject will be sent to the Commission, in February.

The transitional licensing support system (TLSS), which is maintained by NRC's Office of Administration and Resources Management, is in the process of relocating the optical disk and mainframe system to White Flint North; this should be completed by mid-February 1988. The mainframe provides access to the most current information and is a tool for quick access to the full text. The optical disk system will provide complete text/image stand-alone information-retrieval station. Both systems currently serve as models for the DOE LSS development effort, which will be used to assist in meeting the three-year licensing period, as required by NWPA.

3. Early Implementation of a Quality Assurance Program:

Before data collection from any new sources begins, DOE has committed to having qualified quality assurance (QA) programs in place for site characterization activities that may be important to public health and safety and to waste isolation. This commitment is necessary, since most of the data collected during the site characterization program are expected to be used in the licensing process and must, therefore, be of demonstrable quality.

The NRC staff's objective in QA is to conduct (on an audit basis) sufficient review of the DOE program, before data collection activities, to have confidence that the program (or necessary portions of the program) is adequate and in accordance with the Commission's QA regulations in 10 CFR Part 60. The staff's efforts have been aimed at developing staff positions on methods for meeting the regulations, reviewing DOE QA plans and procedures, and most importantly, assessing the implementation of the DOE QA program.

There have been no NRC-DOE staff technical interactions (e.g., audits, meetings) in the QA area during the last quarter, for the NNWSI project or the DOE HQ QA program. In addition, DOE has not responded in a timely manner to NRC staff comments identifying issues within the NNWSI QA program that need early resolution. Methods for increasing interactions and improving DOE's responsiveness to NRC comment letters were discussed with DOE HQ and NNWSI project management in late December, 1987 and early January, 1988. As a result DOE on January 20, 1988 provided formal responses to NRC comment letters on the NNWSI QA program dated August 23, 1986; November 21, 1986; and October 9, 1987. These responses are currently being reviewed by the staff. DOE also rescheduled two audits of their contractors for the first quarter of CY 1988. They had previously postponed all audits through May 1988. The staff is planning on conducting observation audits of the DOE audits to obtain needed information on the status and adequacy of DOE's program.

DOE also recently agreed to an on-site staff review of ongoing data collection of seismic monitoring, tentatively scheduled for the week of February 29, 1988. The purpose of this joint

technical and QA review is to get up to speed on DOE's ongoing data collection activities and provide DOE comments on any area of concern.

It is anticipated that a more productive interaction in the QA area will occur during this next quarter.

In addition to the above activities, during 1987, the General Accounting Office (GAO) conducted a review of activities within the repository program. It is our understanding that the report of its review will focus on QA. The GAO has reviewed information provided by both the NRC staff and DOE, and its report will be issued in mid-1988.

4. Early Establishment of Repository Design Parameters:

The NRC and DOE have agreed that in developing the site characterization program, DOE will use performance allocation: that is, DOE will select tentative values for the contributions that each of the natural and engineered barriers can reasonably be expected to provide to the overall waste isolation performance of the site. Such allocation is the rationale for establishing specifically what information site characterization activities will have to produce. Previous quarterly reports have referenced the fact that the CDSCP will be used to determine how DOE has implemented performance allocation. Using specific criteria contained within the staff's SCP Technical Review Plan, the NRC staff's review of the CDSCP will determine to what extent DOE has implemented performance allocation.

5. Early Resolution of State and Tribal Concerns:

The amendments to the Act have changed this area significantly. DOE will be phasing out all work at the Washington and Texas sites during the 90 days after passage of the Act. NRC staff has ended all activities associated with the Hanford, Washington and Deaf Smith, Texas sites. Agency records for these two sites have been sent to storage. DOE has informed the Indian Tribes and the States of termination of interactions with them, as affected parties in the repository program. Presently, no affected Indian Tribes have been identified, with respect to the Yucca Mountain, Nevada

site. The OGC analysis of the recent amendments will discuss this issue in more detail.

The nature and extent of NRC's interaction with the State of Nevada may depend on whether Nevada elects to enter into a benefits agreement with DOE. If Nevada decides not to accept a benefits agreement, and opposes a repository at Yucca Mountain, NRC's relationship with the state presumably would remain the same. However, the relationship may change if Nevada enters into a benefits agreement that would require the state to participate in the design of the repository, and in preparation of documents, required under law or regulation, governing the effects of the facility on the public health and safety.

6. Adoption of the Policy of Conservatism:

The NRC staff has been concerned that DOE is not conservative enough in its treatment of uncertainty in geotechnical investigations. As discussed in previous quarterly reports, NRC review of the CDSCP and associated study plans, particularly DOE's recognition and consideration of uncertainties and alternative interpretations and conceptual models, will give NRC the most definitive information on their overall progress in adopting a more conservative approach. Specific criteria are given, in the SCP Technical Review Plan, which provide guidance to the staff in its review of this concern. Furthermore, in the staff's CDSCP review, attention will be given to how NRC's final Environmental Assessment comments in this area were considered by DOE in the CDSCP. In addition, DOE's handling of a recently released draft report by a DOE staffer which proposes an alternative conceptual model, that raises serious concerns about the waste isolation capability of the Yucca Mountain site, will be a good indication of how well DOE is considering alternative interpretations and conceptual models.

7. Early Resolution of Issues through a Program of Licensing Topical Reports and Other Mechanisms:

One of the major goals of the HLW repository program is to ensure, to the extent practicable, resolution of licensing issues prior to the licensing hearing. The NRC staff considers

that DOE's SCP, the semiannual progress reports, Topical Reports and Issue Resolution Reports and the staff's comments on these reports (reactive work) are the primary mechanisms for resolution of issues. Rulemakings and NRC technical positions are additional mechanisms. However, in the past this proactive area of work has suffered due to resource limitations. The selection of one site will allow us to reorient our resources to better address both the reactive and proactive work in parallel.

NRC staff review of the CDSCP will determine if DOE has provided an acceptable method for implementing an issue resolution strategy at the Yucca Mountain site. Specific criteria in the staff's SCP Technical Review Plan address this area. In addition, the CDSCP lists topics for which DOE proposes to prepare either Topical Reports or Issue Resolution Reports. The staff will evaluate these topics along with topics which the staff previously identified as areas needing resolution, and then discuss with DOE the best mechanism to work toward resolution of these topics.

In addition to the above discussion of the seven items, we enclose information on the current status of NRC's activities, required by the Act.

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Enclosure:
NRC activities required by NWPA

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ENCLOSURE

NRC'S ROLE UNDER THE NUCLEAR WASTE POLICY ACT AMENDMENTS OF 1987

I. Repository Development Program

Provision	NWPAA Date	Current Schedule	NRC Role
1. Section 112(a)-NRC must concur in Siting Guidelines promulgated by DOE.	7/6/83	Completed 12/84	Action Taken: After review and comment on draft DOE Guidelines in early 1983, NRC received final Siting Guidelines on 11/23/83. NRC held oral presentations on 1/11/84, and public comments were received through 2/1/84. On 2/29, the Commission gave tentative endorsement to the Guidelines and stated that they would concur on the Guidelines provided seven conditions were met. Following six meetings between DOE and NRC staff to resolve these conditions, final Siting Guidelines were received by NRC on 5/15/84. The Commission voted to concur on the Guidelines on 6/22/84. Current Status- DOE published the final Guidelines on 12/6/84. On 12/24/84, the staff forwarded a paper to the Commission (SECY-84-482) recommending that the Commission does not have to concur in the supplementary information to the final Guidelines. The Commission approved this recommendation. Nine petitions challenging the DOE Siting Guidelines have been consolidated into one suit in the 9th Circuit. DOE's motion to transfer the suit to the DC Circuit Court of Appeals was denied by the Ninth Circuit on 10/29/86. A government motion to consolidate the Siting Guidelines case with Environmental Assessment-related cases was denied. In September '87, Court upheld DOE's authority to prohibit use of NWPA funds to assist states in litigation activities. The Nuclear Waste Policy Act Amendments Act of 1987 requires DOE to phase out site-specific activities for the first repository at all candidate sites other than the Yucca Mountain site, and directs DOE to proceed with site characterization at that site. The Siting Guidelines may still be litigable, however, because under Sec.113(b)(A)(iv), before proceeding to sink a shaft at Yucca Mountain, DOE must submit to NRC and the state of Nevada a site characterization plan which must include criteria to be used to determine the suitability of such candidate site for location of a repository developed under 112(a)--the Guidelines.

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Current Version 88/01/21

Provision	NWPAA Date	Current Schedule	NRC Role
2. Section 121(b)-NRC must promulgate technical requirements and criteria.	1/1/84	Promulgated 6/21/83	NRC must issue regulations which specify the technical requirements and criteria for the repository. Current Status- The regulations, which were under development by the staff for several years, were published in the Federal Register on 6/21/83 (48 FR 28194). The regulations are found in 10 CFR Part 60, "Disposal of High-Level Radioactive Wastes in Geologic Repositories Technical Criteria." An Advance Notice of Proposed Rulemaking (ANPR) for the definition of high-level waste (HLW) was published in the Federal Register on 2/27/87 (52 FR No.39, pp.5992-6001). The revision to Part 60 for the definition of HLW has been terminated. An amendment to Part 61 has been initiated to require disposal of Greater-than-Class C wastes in the HLW repository, unless the Commission approves an alternative means of disposal.

Provision	NWPAA Date	Current Schedule	NRC Role
3. Section 121(a)-EPA final high-level waste standards promulgated.	1/7/84	Promulgated 9/19/85	Section 121(b) regulations and criteria must be revised by the Commission, if necessary, to comply with standards being prepared by EPA. Action Taken: NRC's comments on the proposed standards were transmitted to EPA on 5/10/83. Current Status: EPA final high-level waste standards were signed on 8/15/85, published in the Federal Register on 9/19/85 (50 FR 38066), and became effective 11/18/85. NRC staff reviewed its high-level waste criteria (10 CFR Part 60) for conformance with EPA standards, and provided a proposed rule (SECY-86-92) to the EDO and the Commission on 3/21/86, which the Commission approved on 5/15/86 without modification. The proposed revisions were published in the Federal Register on 6/19/86 (51 FR 22288) and comments were due by 8/18/86. In July, 1987 a Federal Appeals Court invalidated EPA's standards. Further action by NRC has been postponed until EPA revises its standards or is able to have parts of them reinstated.
4. Section 114(e)(1)-DOE Project Decision Schedule (PDS). Any agency that can not meet a PDS deadline must notify Congress and DOE why it can not comply.	None Specified	Completed. Revision due early Summer '88.	NRC must coordinate with DOE on the development of the PDS. Action Taken: DOE submitted a preliminary draft PDS for NRC comment on 1/15/85. NRC comments were transmitted to DOE on 3/4/85 (JDavis to BRusche). DOE issued the draft PDS on 7/18/85. NRC comments were approved by the Commission (with modifications) on 9/19/85, and the final comments were transmitted to DOE on 10/24/85. The final PDS was issued on 4/3/86 (51 FR 11466) and copies were available on 4/10/86. Current Status- Staff reviewed the PDS for DOE response to previous NRC comments, and also for any NRC milestones that are subject to Sec.114(e)(2). NRC and DOE staff worked together to resolve specific PDS concerns. On 4/3/87, B. Rusche sent letter to H. Thompson informing him that DOE had initiated a revision to the PDS. As a result of the NWPAA of 1987, DOE is preparing a new draft PDS to be released following release of the draft NWPAA Mission Plan (see item 6).

Provision	NWPAA Date	Schedule	NRC Role
5. Sections 216(a) and 301(b)- Draft Mission Plan published by DOE.	4/7/84	Published 5/84. NWPAA draft amendments due Spring '88.	NRC must coordinate with DOE on the development of the Mission Plan, and specify, with precision, any objections to the Plan. Action Taken: NRC received a preliminary draft on 12/23/83 and sent comments directly to DOE on 2/8/84. The draft Mission Plan required by the Act was released by DOE on 5/8/84 and forwarded to NRC for review and comment by 7/9/84. DOE briefed the Commission on the draft Mission Plan on 6/27/84. Staff comments were signed by the Chairman and forwarded to DOE on 7/31/84. DOE plans to release a new draft Mission Plan to conform to the NWPAA of '87 in Spring, '88.
6. Section 301(b)-Submission of DOE Mission Plan to Congress.	6/7/84	To be submitted to Congress after public comments on draft.	Following Congressional approval of the Mission Plan, NRC will, wherever necessary, conform its waste management program planning guidance to Plan. DOE submitted a final version of the original Mission Plan to Congress on 7/9/85. NRC testified before the Senate Committee on Energy and Natural Resources concerning the Mission Plan on 9/12/85; before the House Subcommittee on Energy and the Environment on 9/13/85; before the Senate Subcommittee on Nuclear Regulation on 10/30/85; and before the House Subcommittee on Energy Research and Production on 11/6/85. DOE issued a draft amendment to the Mission Plan for public comment on 1/28/87 with a 60-day comment period. Staff prepared a response from Chairman Zech to Ben Rusr DOE, with attached comments. Letter was issued on 4/7/87. DOE submitted Mission Plan Amendment to Congress on June 9,1987. On 12/22/87, the NWPAA was enacted. The Mission Plan is being revised to conform to the amendments. After comment period on draft, DOE plans to submit Final Mission Plan to Congress.

Provision	NWPAA Date	Current Schedule	NRC Role
7. Section 117(a)-Provision of information to States/Tribes. NRC must provide timely and complete information regarding siting, development, or design for licensing, construction, operation, regulation, or decommissioning.	In a timely manner.	Ongoing	The Commission met with State and Tribal officials on 6/16/87 to discuss the status of the national program, and NRC staff held its Second Annual Meeting of State and Tribal Representatives in the High-Level Waste Program on 6/30/87. NRC staff met with the Nevada Commission on Nuclear Projects on 9/17/87. NRC and the State of Nevada are scheduled to participate in DOE's "Plenary Session on Consultation Draft Site Characterization Plans" on 1/28-29/88 in Reno, NV. Significant HLW documents are routinely distributed to State reps. In addition, upcoming meeting notices are sent to reps. on a weekly basis.
8. Section 112(b)-DOE recommends to the President 3 sites for characterization for first repository. Each of the 5 sites initially nominated for characterization must be accompanied by an Environmental Assessment (EA).	1/1/85	Site recommendation 5/28/86	Background: DOE to develop draft EAs on sites under consideration after Commission concurrence on the Siting Guidelines. NRC staff to review and comment on EAs. Action Taken: DOE issued draft EAs for 9 potential repository sites on 12/20/84, and the NRC review was completed on 3/20/85. According to the draft PDS, DOE had planned to publish final EAs and nominate and recommend sites in 11/85. However, on 10/30/85, DOE announced that the final EAs and site recommendation would be delayed until late 2/86 to accomodate for the National Academy of Sciences (NAS) review of the ranking methodology. The EAs were issued on 5/28/86, and Washington, Nevada, and Texas were recommended to the President who approved them for characterization. The affected States and Indian Tribes have challenged the EAs in the Ninth Circuit. NRC comments on the Final EAs (SECY-86-357) were transmitted to DOE on 12/22/86. Pending litigation regarding the EAs may be affected by the NWPAA if it is decided that the EAs are no longer relevant to the selection of Nevada for site characterization (see Item 1).

Provision	NWPAA Date	Current Schedule	NRC Role
9. Section 8(b)-President must evaluate the possibility of developing a defense-waste only repository.	1/7/85	Final EIS received Dec.'87.	DOE submitted a final report to the President in 2/85, recommending a combinec commercial and defense repository. On 4/30/85, the President found no basis that a defense-only repository is needed and agreed with DOE's recommendation of a combined repository. DOE issued for public comment a Draft Environmental Impact Statement (DEIS) on "Disposal of Hanford Defense High-Level, Transuranic and Tank Wastes" in 3/86. NRC comments were approved by the Commission and transmitted to DOE on 9/24/86, and were made available to affected state and Tribal representatives soon thereafter. On 9/3/87, DOE briefed NRC staff on how they plan to handle NRC comments on the draft EIS. Final EIS was received in late Dec.'87. NRC staff will perform a limited review to evaluate DOE response to NRC comments on the draft EIS. NRC staff comments due late February.
10. Section 113(b)-Submission to NRC by DOE of site characterization plan (SCP), waste form or package description, and conceptual repository design.	Before sinking shaft	Consultation Draft SCP received 1/8/88.	NRC must review and comment on the statutory SCP. Current Status- A Draft Technical Review Plan and Administrative Plan for CDSCP review was issued by the NRC staff in December 1987. DOE issued a "Consultation Draft" SCP for Yucca Mt. on 1/8/88. The NRC staff is currently reviewing the Yucca Mt. CDSCP and plans to submit comments within 4 months of issuance. The sta will also determine the need for technical workshops within this comment period based on the significance of the staff's draft comments on the CDSCP. DOE currently plans on issuing the statutory SCP in January 1989.
11. Section 114(a)(1)(E)-DOE submits to the President and the public the Commission's preliminary comments concerning sufficiency of at-depth SCA and waste form proposal for inclusion in application.	Prior to 13. below	Prior to 13. below	NRC must provide preliminary comments on whether the at-depth site characterization analysis and waste form proposal is sufficient for inclusion in the DOE construction authorization application.

Provision	NWPAA Date	Current Schedule	NRC Role
12. Section 114(a)(1)(D)-DOE's final Environmental Impact Statement (EIS) on the first proposed repository must include comment from NRC on the draft EIS.	Prior to 13. below	Final EIS 10/94[1]	NRC must review and comment on the draft EIS, which is anticipated in 10/93[1]. NRC is allowed 3 months for review and comment, but had requested 5 months (in draft PDS comments) to allow for Commission involvement and for consultation with host states and affected Indian tribes. In the June 1987 Mission Plan Amendment to Congress, DOE had retained only the 3 months for draft EIS review and comment. The Final EIS is anticipated in 10/94[1].
13. Section 114(a)(2)-President recommends site to Congress for construction.	3/31/87 (may be extended one year if necessary)	10/94[1]	N/A
14. Sections 116(b) and 118(a)-Submission of notice of disapproval by State or Indian tribe.	Up to 60 days after Presidential recommendation	12/94[1]	(See 15 below.)
15. Section 115(g)-Congress may obtain any comments of the Commission with respect to a State/Tribal site disapproval.	Prior to 16. below	Prior to 16. below	NRC must be cognizant of State/Tribal concerns to be able to provide knowledgeable comments to Congress.
16. Section 115(c)-State/Tribal disapproval will take effect unless both Houses of Congress pass resolution of approval within 90 calendar days of continuous session after the date of receipt by Congress of a notice of disapproval.		4/95[1]	(See 15 above.)

[1] Dates are estimates which will have to be revised to reflect DOE NWPAA Mission Plan and PDS (see items 4 and 6).

Provision	NWPAA Date	Current Schedule	NRC Role
17. Section 114(b)-Secretary submits license application (LA) to NRC.	No later than 90 days after date site recommendation is effective.	1/95[1]	An NRC licensing proceeding will be initiated on the license.
18. Section 114(c)-NRC must submit status report to Congress.	One year after submittal of the license application and annually thereafter.	1996[1]	NRC must submit an annual status report to Congress describing the proceedings undertaken through the date of such report regarding the construction authorization application, including a description of: 1) any major unresolved safety issues, and the explanation of the Secretary with respect to design and operation plans for resolving such issues; 2) any matters of contention regarding such application; and 3) any Commission actions regarding the granting or denial of such authorization.
19. Section 114(d)-Commission must issue decision on construction authorization (CA).	Three years after application submitted, or 4 years after submittal (if extended) unless CA is for negotiated site (Section 405(b)(2)).	1998[1]	The 3-year time period for an NRC licensing decision dictates an aggressive program of involvement with DOE and State of Nevada prior to receipt of a license application so as to identify and resolve contentious issues to the maximum extent practicable. Commission will either grant or deny authorization for DOE to begin construction of the first geologic repository. To meet this schedule, a relatively complete, good quality DOE application will be required.

[1] Dates are estimates which will have to be revised to reflect DOE NWPAA Mission Plan and PDS (see Items 4 and 6).

Provision	NWPAA Date	Current Schedule	NRC Role
20. Section 114(d)- NRC decision approving first application shall prohibit emplacement in first repository of a quantity of spent fuel in excess of 70,000 MTHM until such time as a second repository is in operation.		1998[1]	(DOE to report to Congress between 1/1/07 and 1/1/10 on need for second repository. See Items 22 and 23.)
21. Section 114(f)- Any EIS prepared in connection with a repository proposed to be constructed by the Secretary under this subtitle will, to the extent practicable, be adopted by the Commission in connection with the issuance by the Commission of a construction authorization and license for such repository.	At time of construction authorization.	(1998)[1]	NRC staff (Office of the General Counsel) to amend Part 51 to establish what is meant by "to the extent practicable". Proposed Rule is expected by late March.
22. Section 161(a)- Secretary may not conduct site-specific activities with respect to 2nd repository unless Congress has specifically authorized and appropriated funds for such activities.	N/A	N/A	Background - Sec.112(b)(1)(c) of the NWPA of '82 required the Secretary to recommend 3 sites for characterization to the President for a second repository. DOE issued the Area Recommendation Report (ARR) on 1/16/86, which identified 12 possible second repository sites, and subsequently conducted public hearings concerning the second repository. On 5/28/86, DOE announced an indefinite postponement of the Crystalline Project until the need for a second repository could be better assessed. This postponement was legally challenged by States and Tribes in the first repository program. The Mission Plan Amendment of June '87 discussed the basis for extending the schedule for site-specific work on the second repository. In the Mission Plan Amendment, DOE stated that "If affirmative Congressional action is not taken [on the Amendment in FY'87], the DOE will review the more than 60,000 comments received on the ARR issued in January 1986 and prepare a final ARR that identifies potentially acceptable sites for subsequent field work." On 10/1/87, DOE notified governors of potential second repository states that DOE was resuming review of comments on the ARR. This action is now superseded by Section 161 of the NWPAA of '87.

[1] Dates are estimates which will have to be revised to reflect the DOE NWPAA Mission Plan and PDS (see Items 4 and 6).

Provision	NWPAA Date	Current Schedule	NRC Role
23. Section 161(b)-Secretary must report to Congress on need for second repository.	On or after 1/1/07, but not later than 1/1/10.		None specified. DOE and/or Congress may seek NRC views, however.
24. Section 180(a)-No spent fuel or HLW may be transported by or for DOE under Subtitle A (Repository) or Subtitle C (MRS) except in packages that have been certified for such purpose by NRC.	Not specific.		Under an existing NRC/DOE procedural agreement, (48 FR 51875, November 14, 1983), DOE was planning to use packaging approved by NRC in accordance with 10 CFR Part 71, rather than DOE-certified packaging, for all DOE shipments performed under the NWPA from NRC-licensed facilities to an NRC-licensed repository, MRS, or interim storage facility. (Prior to the NWPAA of '87, DOE was required under Sec.137(a) of the NWPA of '82 to obtain NRC certification only for transportation to interim away-from-reactor storage facility. See Item 35.) The Procedural Agreement stipulated, however, that DOE might have to reexamine this intent if it appeared that "such packaging will not be available or if [DOE] can not accomplish its mandate under the NWPA using NRC-certified packaging." Section 180(a) of the NWPAA of '87 appears to eliminate DOE's option to reexamine the intent described in the Procedural Agreement.

II. Test and Evaluation Facility Program

Provision	MWPAA Date	Current Schedule	NRC Role
25. Section 213(a)- DOE is authorized but not required to issue T&E facility siting guidelines.	7/7/83	DOE has not announced	Current Status- No guidelines have been issued. NRC will provide the required consultation if and when the guidelines are issued. (See 27 below)
26. Section 216(a)-Cooperation and Coordination.	None specified		NRC shall assist the Secretary by cooperating and coordinating on any reports under Title II (Research, Development, and Demonstration Regarding Disposal of High-Level Radioactive Waste and Spent Nuclear Fuel) including Test and Evaluation facilities.
27. Section 217(f)(1)-NRC, DOE must conclude written agreement on procedures for T&E facility interaction.	1/6/84	Not scheduled	NRC must work with DOE in developing a written agreement for procedures for review, consultation, and coordination in the planning, construction and operation of the T&E facility. Such an understanding shall also establish the types of reports and other information as the Commission may reasonably require to evaluate health and safety impacts of the T&E facility. Current Status- No agreement has been reached. DOE reported to Congress on 4/6/84 their decision that if a TEF is necessary, it should be collocated, but that the decision on the need for a TEF is being delayed until the progr[illegible] data needs are better established. As of 1/14/88, decision was still on[illegible]d.
28. Section 217(f)(3)(A)-NRC shall carry out a continuing analysis of the T&E activities to evaluate the adequacy of the consideration of public health and safety issues.	None specified		As provided
29. Section 217(f)(3)(B)-NRC required to report to the Secretary, the President, and the Congress as it deems appropriate.	None specified		As provided
30. Section 217(h)-NRC must concur on decontamination and decommissioning of DOE's T&E facility.	Five years after initial operation		NRC will evaluate DOE's decontamination and decommissioning activities, and concur, if deemed appropriate for a T&E facility not located at the site of repository.

III. Interim Spent Fuel Storage

Provision	NWPAA Date	Current Schedule	NRC Role
31. Section 132-The Secretary, the Commission, and other authorized federal officials shall each take such actions as such officials consider necessary to encourage and expedite the effective use of available storage, and necessary additional storage, at the site of each civilian nuclear power reactor.	No specific dates		The Commission will consider which actions are necessary to implement the intent of this provision. (See also Item 37.)
32. Section 134-Hybrid procedures are prescribed for hearings on certain applications for licenses for facility expansions of spent fuel storage and transshipments of spent fuel.	No specific dates, but procedures apply to applications filed after 1/07/83	Final rule published 10/15/85	A proposed rule establishing procedures for expansion of onsite spent fuel storage capacity or transshipment of fuel was published on 12/5/83. Comment period was extended to 2/20/84. A final rule was submitted to the Commission on 7/8/85. Current Status: The Commission approved the final rule on 9/5/85, and the final edited rule was published in the Federal Register on 10/15/85 (50 FR 41662).
33. Section 135(g)-Issuance of NRC proposed rule establishing procedures and criteria for making a determination that onsite storage cannot reasonably be provided at a reactor.	4/7/83	Final criteria published 2/11/85	As provided. A proposed rule was published 4/29/83.Comments received duri the public comment period which ended 6/28/83 have been reviewed. Final criteria were submitted to the Commission on 11/7/84. The criteria were approved by the Commission on 1/10/85. Current Status: The final rule, 10 CFR Part 53, was published on 2/11/85 establishing procedures and criteria for making NRC's determination that a utility is eligible to contract with DOE for Federal Interim storage capacity.

Provision	NWPAA Date	Current Schedule	NRC Role
34. Section 135(a and b)-If the NRC determines that onsite storage cannot reasonably be provided at a reactor by the licensee, DOE may, under certain conditions, provide not more than 1900 metric tons of capacity for storage of spent nuclear fuel from civilian power reactors.	Not specific		NRC will make public health and safety determinations as to the use of any existing DOE facility for spent fuel storage and will license storage in new structures, including modular or mobile spent nuclear fuel storage equipment such as dry casks, as required under this provision of the Act. A Final Rule on "Criteria and Procedures for Determining Adequacy of Available Spent Nuclear Fuel Storage Capacity", 10 CFR Part 53 was published in the Federal Register (50 FR 5563, Feb. 11, 1985).
35. Section 137(a)(1)-Transportation of spent nuclear fuel to a DOE interim away-from-reactor storage facility shall be subject to licensing by NRC and by the Department of Transportation as provided for commercial fuel under existing law.	Not specific		NRC will certify packaging and approve physical security measures for DOE spent fuel transport to a DOE interim away-from-reactor storage facility.
36. Section 137(a)(2)-DOE, in providing for the transportation of spent nuclear fuel under this Act, shall utilize by contract private industry to the fullest extent possible in each aspect of such transportation.	Not specific		No direct role.

Provision	NWPA Date	Current Schedule	NRC Role
37. Section 218(a) and 133-NRC shall by rule establish procedures for the licensing of any technology approved by the NRC for use at the site of any civilian nuclear power reactor. NRC may by rule approve one or more dry spent fuel storage technologies for use at the sites of civilian power reactors without, to the maximum extent practicable, the need for additional site-specific approvals.	Not specific	Final Rule due 12/88.	NRC, using data and information from DOE dry storage demonstration and cooperative programs, will develop regulations to approve dry technology storage at civilian nuclear power reactors without, to the maximum extent practicable, the need for additional site specific approvals by the NRC. On June 17, 1987, NRC's Office of Research was requested to initiate a rulemaking through amendments to 10 CFR Part 72 to streamline the licensing process for use of spent fuel dry storage casks at reactor sites. Current Status- A Proposed Rule is due to the Commission in June '88. The Final Rule is scheduled for December '88.
38. Section (5064)(b)(3)- DOE must consult with Commission and include views of Commission in report to Congress on use of dry cask storage.	Report due 10/1/88.		NRC will consider mission-related portions of DOE report for possible comment as requested.

IV. Monitored Retrievable Storage Program

Provision	NWPAA Date	Current Schedule	NRC Role
39. Section 141(b)(3)-DOE shall consult with the Commission and EPA in formulating the MRS proposal and shall submit their comments on the MRS proposal to Congress along with the proposal.	6/1/85	Completed.	NRC consulted with DOE on development of the MRS proposal, and provided comments (SECY-86-9) to DOE on 2/5/86 for submittal with the proposal to Congress soon thereafter. However, legal challenges by the State of Tennessee delayed the submittal of the MRS proposal to Congress. DOE filed an appeal to expedite a decision on the District Court injunction in the 6th Circuit Court of Appeals in Cincinnati, and oral arguments were held on 7/24/86. The 6th Circuit decided in favor of DOE on 11/25/86, but an appeal by Tennessee to the Supreme Court further delayed the issuance of the proposal to Congress. The Supreme Court denied the appeal on 3/30/87. DOE submitted the proposal to Congress on 3/31/87, proposing to locate the MRS at a site on the Clinch River in Oak Ridge, TN with alternative sites on the Oak Ridge Reservation of DOE and the former site of a proposed nuclear power plant in Hartsville, TN. Congressional hearings took place on May 28 and June 18. Section 142(a) of the NWPAA of '87 annulled and revoked the DOE proposal.
40. Section 141(c)(1)-Submission by Secretary of an environmental assessment with respect to the MRS proposal to Congress.	6/1/85	Completed.	On 2/5/86, NRC staff commented on DOE's MRS proposal which included the EA.
41. Section 141(d)-DOE shall file for license with NRC for MRS.	No sooner than 60 days from date of site selection which may not take place prior to DOE recommendation to the President of a site for a repository.	12/94[1]	NRC has developed revisions to 10 CFR Part 72 to provide the licensing framework for the MRS, and will review DOE's application and make the necessary licensing determinations. Current Status- The proposed rule on 10 CFR Part 72 was submitted to the Commission (SECY-85-374) on 11/25/85, and a supplement (SECY-85-374A) concerning state/tribal involvement was submitted on 3/14/86. Both papers have been approved by the Commission, the Staff Requirements memo was received on 4/21/86, and the proposed revisions were published in the Federal Register on 5/27/86 (51 FR 19106). The comment period closed on 8/25/86, with 196 comments received. The Final Rule is expected in late February '88.

[1] Dates are estimates which will have to be revised to reflect the DOE NWPAA Mission Plan and PDS (see items 4 and 6).

	Provision	NWPAA Date	Current Schedule	NRC Role
42.	Section 148(d)- License conditions for issuance of construction authorization for MRS.		1/95[1]	Any license issued by NRC shall provide that construction not begin until NRC has issued a license for repository construction. Construction or acceptance of spent fuel or HLW shall be prohibited if repository license is revoked by NRC or repository construction ceases.

[1] Dates are estimates which will have to be revised to reflect DOE NWPAA Mission Plan and PDS (see Items 4 and 6).

V. Nuclear Waste Negotiator

Provision	NWPAA Date	Current Schedule	NRC Role
43. Section 405(b)(2)- NRC must issue final decision approving or disapproving issuance of a construction authorization for a repository or MRS, subject to a negotiated and enacted agreement, not later than 3 years after date of submission of application.		1998[1]	
44. Section 407(c)(2)(B)- In EIS prepared with respect to a repository to be constructed at a site other than the Yucca Mt. site, NRC shall consider the Yucca Mt. site as an alternative to such site in the preparation of such statement.		(Will depend on whether Negotiator obtains agreement for repository at a site other than Yucca Mt.)	

[1] Dates are estimates which will have to be revised to reflect the DOE NWPAA Mission Plan and PDS (see Items 4 and 6).

VI. Low-Level Waste Program

(No deadlines were provided in the NWPAA for the LLW management provisions under Section 151).

Provisions	NRC Role
45. Section 151(a)(1)-Commission authorized to establish regulations or other such standards and instructions as it deems necessary or desirable to ensure that each LLW disposal licensee will have adequate financial arrangements for decontamination, decommissioning, site closure and reclamation of sites, structures, and equipment used in conjunction with its LLW disposal.	Preliminary work was begun on a rulemaking related to Section 151(a). Discussions were held with the Office of State Programs and the Office of the General Counsel. The Executive Director for Operations terminated the rulemaking on November 5, 1986 until further research could be completed, at which time initiation of the rulemaking would be considered. This rulemaking will be reconsidered in the second quarter of FY '88 after reviewing the overall recommendations of the financial assurance contractor.
46. Section 151(a)(2)-If Commission determines that long-term maintenance or monitoring will be necessary at a LLW disposal site, Commission must ensure before termination of the license that the licensee has made adequate financial arrangements. Monitoring will be carried out by the person having title and custody for such following license termination.	May require rulemaking by the Commission and the development of guidance for both existing and new commercial LLW disposal sites. For existing sites, analyses will be required to assess long-term performance; monitoring and long-term maintenance requirements; associated costs; and the programs to review monitoring data to identify the need for mitigative actions.
47. Section 151(b)-DOE shall have the authority to assume title and custody of LLW and the land on which such waste is disposed of, upon the request of the owner of such waste and land following termination of the license issued by the Commission for such disposal, if 1) the Commission determines that the requirements for site closure, decommissioning and decontamination have been met with pursuant to Section 115(a); 2) that such title and custody will be transferred to the DOE without cost to the Federal government; 3) that Federal ownership and management is necessary, or desirable to protect the public health and safety.	Likely to require rulemaking/guidance to provide basis for required determinations. Such rulemaking/guidance would require close coordination with DOE which appears to have independent discretion to accept sites following Commission determination.

Provisions	NRC Role
48. Section 151(c)-Adequate financial arrangements for long-term maintenance and monitoring, as well as decontamination and stabilization of special sites must be met in accordance with requirements established by the Commission before DOE may assume title and custody of the waste and the land on which it is disposed.	Similar to Item 52 above.

VII. NRC's Role Relating to Other Provisions in the Act

	Provisions	NWPA Date	Current Schedule	NRC Role
49.	Section 5062-Transportation of Pu by aircraft through United States airspace.			This section of the NWPAA does not directly impact the civilian nuclear waste program. The Division of Safeguards and Transportation (SGTR), Office of NMSS, presently is seeking clarification from OGC and IP as to NRC implementation of these provisions.
50.	Section 223(b)-By April 7, 1983, DOE and NRC must publish a joint notice in the Federal Register stating that the U.S. is prepared to cooperate and provide technical assistance to non-nuclear weapon states in the field of spent fuel storage and disposal.	4/7/83 Annual revisions required	Completed 3/30/83, w/annual updates.	NRC will prepare a joint Federal Register notice with DOE and will provide technical assistance to non-nuclear weapon states pursuant to the Act and the FR notice. NRC and DOE will update and reissue this notice annually for 5 years, as required. Action Taken: A FR notice was published following coordination with DOE, ACDA, and the State Department on 3/30/83. Annual updates of the notice were published in the Federal Register on 4/6/84, 4/5/85, 4/3/86, and 4/3/87 (52 FR 10792).
51.	Section 302(b)(1)(A)-The Commission shall not issue or renew a license to use a utilization or production facility under Section 103 or 104 of the Atomic Energy Act unless the applicant has entered into a waste disposal contract with the Secretary of Energy or the Secretary affirms in writing that the licensee is negotiating in good faith to enter into such a contract. Section 302(b)(1)(B)-The NRC in its discretion may require as a precondition to the issuance or renewal of a reactor license that the applicant shall have entered into an agreement with DOE for the disposal of high-level waste or spent fuel that may result from such a license.	6/30/83	Completed 6/30/83	The final waste disposal contract proposal was published by the DOE in the Federal Register on 4/18/83. All necessary contracts were signed and received by the DOE on or before the 6/30/83 statutory deadline.

Provision	NWPA Date	Current Schedule	NRC Role
52. Section 303-DOE shall consult with the Chairman of the NRC in conducting a study of alternative approaches to managing construction and operations of all civilian waste management facilities and then DOE is to report Congress.	1/6/84	Action Completed 4/18/85	At the invitation of the Secretary, the Chairman will consult on the "alternative approaches" study. Actions Taken-DOE chartered an Advisory Panel on Alternative Means of Financing and Managing Radioactive Waste Facilities (AMFM) to assist them in conducting the required study. As part of the consultation process, DOE extended the invitation to have an NRC observer attend the AMFM Panel meetings. The Panel held ten meetings between January and November 1984, which were attended by NRC staff observers, and toured DOE waste facilities at Hanford, NTS, and WIPP. Panel held its tenth and final meeting on 11/13-14/84, including a meeting with Secretary Hodel on 11/14/84 to discuss their recommendations and forthcoming report. A final draft of the report received by NRC on 12/5/84 concludes that several organizational forms are more suited than DOE for managing the waste program, and identifies a public corporation as its preferred alternative. The report also recommends adoption of several specific program components which are independent of the type of organization ultimately chosen to handle the program, including an Advisory Siting Council. The Final Draft Report was sent to the Chairman for consultation on 2/19/85. The staff provided comments to the Chairman on 3/8/85. The Chairman transmitted his comments to Secretary Herrington on 3/22/85, which were forwarded to the President along with DOE's recommendations on 4/18/85. recommended retaining the present management structure at least through the siting and licensing phase of the program.
53. Section 306-NRC is required to promulgate regulations or other suitable guidance for the licensing and qualifications of civilian nuclear power plant personnel and submit a report to congress on its activities under this action.	1/6/84	Completed	As provided. The Commission issued a policy statement on 2/7/85, concerning personnel training and qualifications (10 CFR Part 50). This policy statement was published in the Federal Register on 3/20/85. Proposed amendments to Part 55 dealing with simulator training requirements were published in the Federal Register on 11/26/84. Current Status: The final rulemaking package on Part 55 and 3 associated Regulatory Guides was approved by the ACRS on 12/5-7/85, and final Office review has been completed. The final amendment to Part 55 was submitted to CRGR for review on 2/26/86, which recommended several modifications. The edited final rule was approved by CRGR on 3/19/86, and approved by the EDO on 4/17/86. The Commission approved SECY-86-123 with modifications on 10/17/86. Staff resubmitted the final paper (SECY-86-338) to OCM in late 11/86. Commission affirmed paper on 2/12/87. Rule was published in Federal Register on 3/25/87.