

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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February 21, 1986

The Honorable Robert T. Stafford, Chairman  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

In the October 30, 1985, Committee hearing on high-level radioactive waste, Senator Moynihan requested the NRC to consider the question of the 1998 deadline in the Nuclear Waste Policy Act (NWPA), and to advise the Committee as to whether the 1998 deadline is conducive to the best outcome of the program or whether this date should be reconsidered by Congress. The enclosed Insert-For-The-Record is in response to that request. We have also included the answers to the five post-hearing questions submitted to us for consideration.

If I can be of further assistance, please contact my office.

Sincerely,

  
Carlton Kammerer, Director  
Office of Congressional Affairs

Enclosure:  
As stated

cc w/o enclosures:  
Sen. Lloyd Bentsen  
Sen. Daniel Moynihan

INSERT FOR THE RECORD  
OCTOBER 30, 1985 HEARING ON HIGH-LEVEL RADIOACTIVE WASTE  
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

At the hearing before the Senate Committee on Environment and Public Works held on October 30, 1985, concerning the high-level radioactive waste program, a question was raised about the 1998 deadline in the Nuclear Waste Policy Act (NWPA), P.L. 97-425, for disposing of waste. Specifically, the Commission was asked whether the 1998 fixed deadline is conducive to the best outcome of the high-level waste program or whether this date should be reconsidered by Congress.

Based upon our review of the DOE Mission Plan and DOE's ongoing progress, we believe the schedules in the Mission Plan are aggressive and optimistic. However, we do not believe that use of the 1998 deadline as a target date is reason for concern at this time. It is significant to note in DOE's testimony to the Committee that it does not intend to take shortcuts on safety-related items in order to meet schedules. The Commission believes this is a very important commitment.

We believe it is especially important for DOE to take the time it needs in developing its detailed plans for site characterization to assure that site characterization work will indeed be complete. Also, as we testified, taking the time to get quality assurance programs fully in place prior to the start of site characterization is essential to a timely licensing decision.

The Commission believes that it will be possible to provide a better assessment of the 1998 deadline following review of DOE's detailed site characterization plans which are scheduled for completion in 1986.

Consistent with DOE's testimony, the Mission Plan reflects slips by DOE in schedules for early milestones in the program in order to allow more careful deliberation in the process of repository siting and development. The 1998 deadline and these slips have led to a compression in Mission Plan schedules for site characterization and licensing. As we testified, we know of no specific actions which could permit compressing licensing schedules. In the October 30th hearing, DOE announced a further slip in its schedules for selecting sites for site characterization. As a result of these points we believe that DOE's reference schedule in the Mission Plan is optimistic. DOE recognizes this, however, and has presented alternative schedules in the Mission Plan. (The NRC staff has prepared a more detailed analysis of DOE's progress thus far. We have appended this analysis for your consideration.)

Irrespective of the date selected, the Commission will not permit any deadline to compromise what we believe is necessary to provide reasonable assurance that the public health and safety will be protected.

Commissioner Asselstine has the following additional comment:

I continue to be concerned that the 1998 deadline for repository operation appears to be the controlling factor in setting the schedules for intermediate steps in the repository development process. The effect of this deadline, when coupled with the delays experienced in accomplishing early repository activities, is to compress substantially the time available for site characterization and licensing. The success or failure of the repository program is likely to depend in large measure on the adequacy of the site characterization and licensing steps. The schedule of these steps must be sufficient to permit a thorough exploration of all safety and environmental issues. The Commission has already informed DOE and the Congress that DOE's proposed schedule for the repository licensing process is too tight. DOE's site characterization plans will provide a basis for evaluating the adequacy of DOE's timetable for site characterization activities. When DOE submits its site characterization plans, I believe the Congress should review the adequacy of DOE's proposed schedules for site characterization and licensing and make whatever adjustments to the schedule that are needed to assure a thorough and effective review of the issues.

NRC STAFF ANALYSIS  
OCTOBER 30, 1985 HEARING  
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
QUESTION CONCERNING THE 1998 DEADLINE FOR  
HIGH-LEVEL RADIOACTIVE WASTE DISPOSAL  
IN THE NUCLEAR WASTE POLICY ACT  
[P.L. 97-425]

During the October 30, 1985, hearing with the Senate Committee on Environment and Public Works, Senator Moynihan asked the Commission in a formal way to consider the question of the 1998 deadline in the Nuclear Waste Policy Act (NWPA) and to advise the Committee, in their collective and individual judgment, whether that ought to be a fixed deadline or whether Congress ought to look at that legislation again. The Senator further asked for the Commission's judgment "...about whether the fixed deadline is conducive to the best outcome..." The Chairman replied that he also thought "...there is a related question of is this date absolutely necessary to be met?" Senator Moynihan then questioned whether the Commission agreed that "The date can serve some purposes and not others. It may lead you to make decisions which you are really not confident with. We are talking 10,000 years, so we can take as much time as is needed to make the judgement. Would you agree with this?" Senator Stafford thought it would be interesting to have some data from the Commission.

The events leading up to repository operation are presented in DOE's Mission Plan for the Civilian Radioactive Waste Management Program (DOE/RW-0005), which was submitted to Congress in June 1985. In Section 3.1.7 of the Mission Plan, DOE considered possible alternatives for completing these activities and estimated completion times for each alternative. Enclosed is the summary of the alternatives which appear in the Mission Plan. If the DOE estimate for the maximum duration of each phase of repository development is assumed, the 1998 deadline could be extended by 20 years, to 2018. It has been the Commission's position in the past that the NRC's high-level waste management program is to be directed to an effective and efficient discharge of NRC's responsibilities under the NWPA based on the premise that, in the absence of unresolved safety concerns, and assuming sufficient resources, the NRC regulatory program will not delay implementation of the Executive Branch's program as reflected in the DOE Project Decision Schedule (NWPA Section 114(e)). However, in no case will the NRC make its decision in the face of unresolved safety concerns, just to satisfy milestone dates. DOE has stated before the Senate Committee on the Environment and Public Works, that it does not intend to take shortcuts on safety in order to meet schedules. The staff considers this to be a very important commitment on the part of DOE.

#### EXPERIENCE

We note that several early milestones specified in the Act have not been met. Key examples of this include the Repository Siting Guidelines (due 7/6/83, completed 12/84), the Mission Plan (due 6/7/84, completed 7/9/85), and the Secretary's recommendation to the President of three sites for characterization by 1/1/85 (expected in the spring). It should be noted that these activities

involved parallel efforts in setting up new activities within DOE. The DOE was in a start-up situation involving staffing and organizing. The Nuclear Waste Policy Act of 1982 (NWSA) had been signed into law on January 7, 1983. The Office of Civilian Radioactive Waste Management (OCRWM) was formally created in September 1983 to carry out the functions of DOE under the Act. The first official Director of OCRWM, Ben Rusche, was confirmed in May 1984. Mr. Rusche was preceded by two acting directors, Robert Morgan and Michael Lawrence. The failure to meet early milestones may be due at least partially, to the startup situation. We do not believe these early failures to meet schedules portend a continuing inability to meet schedules.

#### CURRENT PLANNING

Recognizing delays in meeting early milestones, DOE in the optimum schedule of its draft Project Decision Schedule (PDS) has established schedules to complete future milestones to ensure meeting the 1998 commitment that appears in both the Act and DOE contracts with the utilities. For example, in the draft PDS, DOE has proposed a nine month reduction in the statutory duration of the NRC review of the repository license application (from 36 months to 27 months). The Commission informed DOE that it continued to believe that the three year period provided by the NWSA is a very optimistic estimate for the time required to reach a decision on repository construction, and that any possibility that this review period can be met depends on DOE submitting a complete and high quality license application. Both NRC and DOE are seeking ways to reduce the time, without sacrificing quality, for the license decision. Thus far, NRC has not identified what we believe to be a significant time saving practice under the current program. The Commission has identified six key actions that DOE would need to complete to make the 36 month review more probable. We have had general agreement by DOE management on these six actions. Because these actions will take DOE some time to fully implement, the uncertainty that the review can be accomplished within 36 months continues to exist. We note here that in the NRC comments on the various bills leading up to the NWSA, we took the position that the staff required at least 42 months to reach a decision on DOE's repository license application. The act provides for NRC's review to be completed within 36 months, extendable to 48 months.

We believe another area of current uncertainty in planning is the time actually allotted in DOE's optimum schedule for completion of in-situ testing once the exploratory shafts have been sunk at the sites where site characterization is to be performed. It appears, based on our knowledge of the sites being considered by DOE, that the optimum schedules in the Mission Plan for site characterization are optimistic. However, the details of what DOE intends to accomplish in site characterization will not be known until DOE publishes its Site Characterization Plans.

Concerning the question of whether it is absolutely necessary for the 1998 deadline to be met, there do not appear to be any technical reasons why a repository would have to be operational by then. There are acceptable ways that these wastes can be safely managed for periods beyond 1998. However, the unavailability of a geologic repository beyond 2007-2009 may have legal implications. The Commission addressed the question regarding the date for

repository availability in its 1984 Waste Confidence decision [49FR34658], stating that it found "reasonable assurance that one or more mined geologic repositories for commercial high-level radioactive waste and spent fuel will be available for the years 2007-2009...". The Commission's Waste Confidence decision is unavoidably in the nature of a prediction and recognizes that the possibility of significant unexpected events remains open. The Commission will review its conclusions on waste confidence should significant and pertinent unexpected events occur, or at least every five years, until a repository for high-level radioactive waste and spent fuel is available.

### CONCLUSION

The NRC believes that programmatic milestones such as those included in the NWPA are useful in ensuring focus on the program. The commitment of management of both the NRC and DOE not to allow schedules to degrade attention to safety is an important safeguard in this program.

A better judgement by the NRC on whether the 1998 deadline in the NWPA should be reconsidered, can better be made after the review of the Site Characterization Plans that DOE will be submitting as required by NWPA Section 113. (DOE will be taking this action regardless of whether an MRS is authorized by Congress). At that time, the Environmental Assessments (Section 112) will have been issued, and it may be possible to evaluate whether judicial review of these documents is likely to result in program delays. Also at that time, DOE will have narrowed the number of sites from the current nine to the three it intends to characterize, these sites will have been approved by the President, and the testing programs to reduce the technical uncertainties at the recommended sites will be available. These plans will show for the first time the data needs that DOE has identified and the amount, kinds, and duration of testing that DOE considers necessary to support licensing decisions. This will allow assessments to be made of the duration of site characterization, the timing of the Presidents recommendation of a repository site to congress (NWPA date for this action is March 31, 1987) the timing of the license application, and whether subsequent NWPA milestones can be met.

Table 3.2. The Reference Schedule and Possible Alternatives for Completing the Major Program Phases for the First Repository

REF. DOE/RW-0005; MISSION PLAN FOR THE CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM; JUNE, 1985; VOLUME I, p. 60

Major Program Phases	Recommend Sites for Characterization	Characterize Sites	Select Site and Obtain Site Approval	NRC Licensing Review	Construct and Test Repository
Reference schedule  (start 12/84)	Secretary recommends 3 sites to President by November 1985, President approves sites in minimum time provided by Act (13 months)	Recommendation based on in-situ testing (47 months)	President recommends site, no State or Indian tribe disapproval (17 months)	NRC review (27 months)	Phased construction, phase 1 complete in 53 months, phase 2 complete in 90 months
Alternative schedule cases and effect on reference schedule	1 A Extensive modifications required to draft EAs (+6 months)	2-A Recommendation based on surface studies and ES construction data only (-11 months)	3 A Additional DEIS review or extensive modifications required (+9 months)	4 A NRC review takes nominal period allowed by Act (+9 months)	5-A Construction delays (+24 months, each phase)
	1 B Secretary requires additional data to support site recommendation (+12 months)	2 B Site permitting delays (+9 months)	3 B State or Indian tribe disapproval submitted; Congress overrides (+5 months)	4 B NRC requires additional review time as allowed by Act (+21 months)	5-B full-scale repository (+17 months for phase 1 -20 months for phase 2)
	1-C President requires additional review period allowed by the Act (+6 months)	2-C ES construction delays (+24 months)	3 C State or Indian tribe disapproval submitted, site disapproved, new site selected (+19 months)	4 C NRC requires extensive additional information (+33 months)	
		2-D Extensive in-situ testing required (+36 months)		4 D NRC rejects site; new site selected, approved, and CA issued (+48 months)	
Maximum phase duration	37 months	116 months	45 months	108 months	94 months until initial waste acceptance

Abbreviations: CA, construction authorization; DEIS, draft environmental impact statement; EAs, environmental assessments; ES, exploratory shaft.

QUESTION 1. THERE HAS BEEN MUCH DISCUSSION OF THE EFFORTS BEING MADE TO TRY AND KEEP TO THE SCHEDULES OUTLINED IN THE NUCLEAR WASTE POLICY ACT. OUGHT WE TO CONSIDER MODIFYING THESE SCHEDULES? PLEASE CONSIDER IN YOUR ANSWER THAT CONGRESS MAY OR MAY NOT APPROVE THE CONSTRUCTION OF A MONITORED RETRIEVABLE STORAGE FACILITY.

ANSWER.

NRC COULD PROVIDE THE CONGRESS BETTER INFORMATION ON THE SCHEDULES AND MILESTONES IN THE NWPA AFTER WE REVIEW THE DETAILED TECHNICAL PLANS AND SCHEDULES THAT DOE IS PREPARING AS REQUIRED BY NWPA (SECTION 113), REGARDLESS OF WHETHER OR NOT AN MRS IS AUTHORIZED BY CONGRESS. WE OBSERVE, HOWEVER, BASED UPON OUR REVIEW OF THE DOE MISSION PLAN AND THE PROGRESS BEING MADE BY DOE, THAT THE SCHEDULES ARE AGGRESSIVE. (SEE RESPONSE TO QUESTION 2.) THERE DO NOT APPEAR TO BE ANY TECHNICAL REASONS WHY A REPOSITORY WOULD HAVE TO BE OPERATIONAL BY THE NWPA DEADLINE OF 1998. THERE ARE ACCEPTABLE WAYS THAT THESE WASTES CAN BE SAFELY MANAGED FOR PERIODS BEYOND 1998, INCLUDING EXPANSION OF STORAGE CAPACITY AT THE REACTOR SITES USING POD CONSOLIDATION AND/OR DRY STORAGE TECHNOLOGIES.

HOWEVER, IF A GEOLOGIC REPOSITORY WERE TO BE UNAVAILABLE BEYOND THE YEARS 2007-2009, THERE MAY BE LEGAL IMPLICATIONS RELATED TO THE COMMISSION'S WASTE CONFIDENCE DECISION. IN THAT DECISION THE



COMMISSION STATED THAT IT WOULD REVIEW ITS FINDING OF "REASONABLE ASSURANCE THAT ONE OR MORE MINED GEOLOGIC REPOSITORIES FOR COMMERCIAL HIGH-LEVEL RADIOACTIVE WASTE AND SPENT FUEL WILL BE AVAILABLE FOR THE YEARS 2007-2009....," SHOULD SIGNIFICANT OR PERTINENT UNEXPECTED EVENTS OCCUR, OR AT LEAST EVERY FIVE YEARS, UNTIL A REPOSITORY FOR HIGH-LEVEL RADIOACTIVE WASTE AND SPENT FUEL IS AVAILABLE.

QUESTION 2.

PLEASE EXPLAIN IN SOME DETAIL YOUR VIEWS ON THE PROPER TIME TO PERFORM CHARACTERIZATION FOR EACH POTENTIAL REPOSITORY SITE, AND THE NUMBER OF SITES FOR WHICH YOU BELIEVE CHARACTERIZATION OUGHT TO BE DONE.

ANSWER.

THE AMOUNT OF TIME NEEDED TO CONDUCT TESTS AND PERFORM SITE CHARACTERIZATION IS DEPENDENT ON THE SPECIFIC TECHNICAL ISSUES TO BE RESOLVED AND UNCERTAINTIES THAT EXIST AT EACH SITE. SHAFT CONSTRUCTION REQUIRES 1-2 YEARS. DOE WILL IDENTIFY THE REQUIRED TEST PROGRAM IN ITS SITE CHARACTERIZATION PLANS (SCP'S). BASED ON OUR KNOWLEDGE OF THE SITES BEING CONSIDERED BY DOE, IT APPEARS THAT THE MISSION PLAN SCHEDULES FOR SITE CHARACTERIZATION ARE OPTIMISTIC. HOWEVER, A BETTER BASIS FOR A JUDGMENT ON THIS MATTER WILL BE AVAILABLE FOLLOWING ANALYSIS OF DOE'S SCP.

REGARDING THE NUMBER OF SITES TO BE CHARACTERIZED, THE NWPA REQUIRES COMPLETION OF SITE CHARACTERIZATION OF AT LEAST THREE CANDIDATE SITES. THE CHARACTERIZATION OF ANY NUMBER OF SITES LARGER THAN THREE IS A PROGRAMMATIC MATTER THAT MUST BE DETERMINED BY DOE.

COMMISSIONER ASSELSTINE ADDS:

COMMISSIONER ASSELSTINE BELIEVES THAT DOE SHOULD CONSIDER CHARACTERIZING FOUR SITES. HE BELIEVES THAT CHARACTERIZING FOUR SITES, WHEN COUPLED WITH A CAREFUL SITE SELECTION PROCESS, WILL PROVIDE GREATER ASSURANCE THAT THE REPOSITORY LICENSING PROCESS WILL PROCEED ON A REASONABLE SCHEDULE.

QUESTION 3. IN DISCUSSIONS OF HOW BEST TO DISPOSE OF LOW-LEVEL WASTES, IT HAS BEEN SUGGESTED THAT THE MOST RADIOACTIVE OF THE LOW-LEVEL WASTES (THE SO-CALLED C+ OR C WASTES) MIGHT BE HANDLED MOST APPROPRIATELY BY DISPOSAL IN A HIGH-LEVEL REPOSITORY. WHAT ARE YOUR VIEWS ON THE ADVISABILITY OF DOING SO? WHAT MIGHT BE THE PRACTICAL IMPACT, IF ANY, ON THE HIGH-LEVEL PROGRAM?

ANSWER.

THE COMMISSION IS AUTHORIZED UNDER NWPA [SEC. 2(12)(B)] TO DEFINE HIGH-LEVEL WASTE BY RULE. SOME WASTE, CURRENTLY CLASSIFIED AS LOW-LEVEL WASTE ABOVE CLASS C, MAY BE CLASSIFIED AS HIGH-LEVEL WASTE AS A RESULT OF THE COMMISSION'S RULEMAKING.

FROM A PUBLIC HEALTH AND SAFETY PERSPECTIVE, THE NRC WOULD NOT CONSIDER IT NECESSARY TO REQUIRE DISPOSAL IN A HLW REPOSITORY OF ABOVE CLASS C WASTES, IF SUCH WASTES ARE NOT DEFINED BY THE COMMISSION AS HLW. ANY DECISION TO DISPOSE OF ABOVE CLASS C WASTES IN A REPOSITORY WOULD BE BASED ON ECONOMIC OR INSTITUTIONAL, RATHER THAN SAFETY CONSIDERATIONS.

THE COMMISSION SEES NO TECHNICAL REASON TO EXCLUDE ABOVE CLASS C LOW-LEVEL WASTES\* FROM DISPOSAL IN THE GEOLOGIC REPOSITORY PROVIDED THAT APPROPRIATE DESIGN MEASURES ARE TAKEN. FOR EXAMPLE, THESE WASTES WOULD HAVE TO BE PROCESSED AND PACKAGED SO THAT

EMPLACEMENT IN A REPOSITORY WOULD NOT ADVERSELY AFFECT THE LONG-TERM, ISOLATION CAPABILITY OF THE REPOSITORY. WE NOTE THAT THE COMMISSION'S EXISTING REGULATIONS (E.G., 10 CFP 60.102) PERMIT THE DISPOSAL OF WASTE TYPES OTHER THAN HIGH-LEVEL WASTE IN A GEOLOGIC REPOSITORY.

PRACTICAL IMPACTS ASSOCIATED WITH DISPOSAL OF ABOVE CLASS C WASTES IN A HLW REPOSITORY WOULD INCLUDE EFFECTS ON THE LAYOUT AND DESIGN OF THE REPOSITORY AND THE NEED FOR ADDITIONAL WASTE PACKAGING/HANDLING FACILITIES. THE RECENTLY ENACTED LOW-LEVEL RADIOACTIVE WASTE POLICY AMENDMENTS ACT OF 1985 [P.L. 99-240] DIRECTS DOE TO PREPARE A COMPREHENSIVE REPORT ON DISPOSAL OF ABOVE CLASS C WASTES.

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\* THIS RESPONSE RECOGNIZES THAT THE LOW-LEVEL RADIOACTIVE WASTE POLICY AMENDMENTS ACT OF 1985 [P.L. 99-240] GIVES RESPONSIBILITY FOR DISPOSAL OF CLASS C WASTES (AND BELOW) TO THE STATES AND ABOVE CLASS C LOW-LEVEL WASTES TO THE FEDERAL GOVERNMENT.

QUESTION 4. DO YOU BELIEVE THAT THE 1 MIL/KILOWATT HOUR SURCHARGE ON NUCLEAR ELECTRICITY WILL BE SUFFICIENT TO FUND THIS PROGRAM? HOW DO YOU CALCULATE THAT THIS MIGHT BE CHANGED UNDER PROPOSALS TO MODIFY THE PRICE-ANDERSON ACT THAT WOULD TAP THE NUCLEAR WASTE DISPOSAL FUND FOR COVERAGE OF DOE CONTRACTOR LIABILITY?

ANSWER.

THE NUCLEAR WASTE POLICY ACT OF 1982, SEC. 302(A)(4), [P.L. 97-425] REQUIRES DOE TO ANNUALLY REVIEW THE AMOUNT OF THE SURCHARGE ON NUCLEAR ELECTRICITY, TO EVALUATE WHETHER COLLECTION OF THE FEE WILL PROVIDE SUFFICIENT REVENUES TO OFFSET THE PROGRAM'S COSTS. THESE DOE REVIEWS HAVE IN THE PAST SUPPORTED THE SUFFICIENCY OF THE 1 MILL/KILOWATT HOUR SURCHARGE.

THE NRC DOES NOT HAVE THE CAPABILITY TO ASSESS INDEPENDENTLY ALL OF THE FACTORS NECESSARY TO MAKE A DETERMINATION OF THE ADEQUACY OF THE USER-FEE, AND BELIEVES THAT IT WOULD BE MORE APPROPRIATE FOR DOE TO RESPOND TO THESE QUESTIONS.

QUESTION 5. CONCERN HAS BEEN EXPRESSED ABOUT THE POTENTIAL PROBLEMS OF TRANSPORTING SPENT FUEL TO A REPOSITORY OVER SNOWY MOUNTAIN ROADS. TO THE EXTENT THAT YOU BELIEVE TRANSPORTATION IS A VALID CONCERN FOR THIS PROGRAM, DO NOT CONGESTED URBAN AREAS POSE COMPARABLE PROBLEMS FOR SAFETY AND SECURITY?

ANSWER.

NRC AND THE DEPARTMENT OF TRANSPORTATION SHARE RESPONSIBILITY FOR REGULATING SAFETY IN THE TRANSPORTATION OF RADIOACTIVE MATERIALS, AS SET FORTH IN A MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN THE TWO AGENCIES (44 FR 38690). UNDER THE MOU'S TERMS, THE RESPONSIBILITY FOR SAFETY IN ROUTING SPENT FUEL SHIPMENTS RESTS WITH DOT, WHILE RESPONSIBILITY FOR SHIPMENT CONTAINER SAFETY AND PHYSICAL SECURITY RESTS WITH NRC. WE HAVE EVALUATED SHIPMENT EXPERIENCE AND TEST STUDIES. THE NRC IS CONFIDENT THAT IT IS EXTREMELY UNLIKELY THAT THE CONTAINERS WILL BE BEACHED IN AN ACCIDENT AND RELEASE A SIGNIFICANT QUANTITY OF RADIOACTIVE MATERIAL. HOWEVER, WE BELIEVE THAT STATE AND LOCAL AUTHORITIES MUST BE PREPARED TO RESPOND TO ACCIDENTS INVOLVING SPENT FUEL SHIPMENTS. THE EXISTENCE OF AN EMERGENCY RESPONSE CAPABILITY IS THEREFORE AN IMPORTANT CONSIDERATION IN EVALUATING THE IMPACT OF SPENT FUEL SHIPMENTS ALONG TRANSPORTATION CORRIDORS TO A HIGH-LEVEL REPOSITORY. PUBLIC CONCERNS OVER THE POTENTIAL FOR ACCIDENTS ON EITHER SNOWY MOUNTAIN

ROADS OR IN CONGESTED URBAN AREAS NEED TO BE INCLUDED IN EVALUATING IMPACTS ALONG TRANSPORTATION CORRIDORS. IN NRC COMMENTS ON THE ENVIRONMENTAL ASSESSMENTS FOR THE NINE CANDIDATE SITES FOR THE FIRST HIGH-LEVEL WASTE REPOSITORY, WE ASKED DOE TO CONSIDER TRANSPORTATION CORRIDOR IMPACTS. DOT HAS ADDRESSED CONCERNS OVER ROUTE SAFETY IN ITS COMPREHENSIVE RULEMAKING FOR HIGHWAY ROUTING OF RADIOACTIVE MATERIAL (DOT DOCKET NO. HM-164). NRC HAS ADDRESSED THE QUESTION OF PHYSICAL SECURITY FOR SPENT FUEL SHIPMENTS AND HAS AN INTERIM REGULATION (10 CFR 73.37) IN PLACE. WE ARE CONSIDERING AMENDING THIS REGULATION TO TAKE INTO ACCOUNT NEW EXPERIMENTAL DATA FROM A SAFEGUARDS RESEARCH PROGRAM THAT INDICATES THAT THE HEALTH EFFECTS RESULTING FROM SABOTAGE OF A SPENT FUEL SHIPMENT WOULD BE MUCH SMALLER THAN THOSE ORIGINALLY ESTIMATED. FOR CERTAIN SPENT FUEL SHIPMENTS THESE AMENDMENTS WOULD PROVIDE CONTINUED PROTECTION AGAINST SABOTAGE AND RELIEVE THE LICENSEE OF NON-ESSENTIAL REQUIREMENTS. (SEE 49 FR 23867.)