

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

February 2, 1996

OFFICE OF THE SECRETARY

MEMORANDUM TO: Members of LSS Advisory Review Panel FROM: John C. Hoyle SUBJECT: INFORMATIONAL MATERIALS

Enclosed for your information are three documents:

- 1. Transcript of January 30, 1996 HLW Briefing by DOE (LSS discussion begins on p. 23)
- 2. Commission Information Paper (SECY-96-020)
- 3. January 17, 1996 letter from Clark County

The Clark County letter poses several topics for consideration by the LSSARP. I am aware of the budgetary constraints which hamper your ability to attend meetings. I will, however, attempt to develop a schedule for discussion of such topics and the method of discussion (conference call, teleconferencing, etc.) soon. As you are aware, the NRC Office of Inspector General is currently completing a review of LSS activity as a follow-up to the IG Audit Report issued on March 17, 1995. I will await the outcome of that report as well.

Enclosures: As Stated

cc: A. Levin, LSSA

## ORIGINAL

## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

## Title:BRIEFING BY DOE ON STATUS OF HIGH LEVELWASTE PROGRAM - PUBLIC MEETING

Location: Rockville, Maryland

Date: Tuesday, January 30, 1996

Pages: 1 - 42

7

ANN RILEY & ASSOCIATES, LTD. 1250 I St., N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

## DISCLAIMER

ĩ

:

١,

This is an unofficial transcript of a meeting of the United States Nuclear Regulatory Commission held on January 30, 1996 in the Commission's office at One White Flint North, Rockville, Maryland. The meeting was open to public attendance and observation. This transcript has not been reviewed, corrected or edited, and it may contain inaccuracies.

The transcript is intended solely for general informational purposes. As provided by 10 CFR 9.103, it is not part of the formal or informal record of decision of the matters discussed. Expressions of opinion in this transcript do not necessarily reflect final determination or beliefs. No pleading or other paper may be filed with the Commission in any proceeding as the result of, or addressed to, any statement or argument contained herein, except as the Commission may authorize.

	_
1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
3	* * *
4	BRIEFING BY DOE ON STATUS
5	OF HIGH LEVEL WASTE PROGRAM
6	***
7	PUBLIC MEETING
8	***
9	· · · · · · · · · · · · · · · · · · ·
10	
11	Room 1F-16
12	White Flint Building
13	11555 Rockville Pike
14	Rockville, Maryland
15	
16	Tuesday, January 30, 1996
17	
18	The Commission met in open session, pursuant to
19	notice, at 10:05 a.m., the Honorable SHIRLEY A. JACKSON,
20	Chairman of the Commission, presiding.
21	
22	COMMISSIONERS PRESENT:
23	SHIRLEY A. JACKSON, Chairman of the Commission
24	KENNETH C. ROGERS, Member of the Commission
25	

1

.

-

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

•

1	STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:
2	JOHN C. HOYLE, Secretary
3	KAREN D. CYR, General Counsel
4	DANIEL DREYFUS, Director
5	Office of Civilian Radioactive Waste Management, DOE
6	LAKE H. BARRETT, Deputy Director
7	Office of Civilian Radioactive Waste Management, DOE
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

.

7

-- -- ..

2

- --

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034 PROCEEDINGS

1

2

Ξ

[10:05 a.m.]

3 CHAIRMAN JACKSON: Good morning, ladies and 4 gentlemen, Dr. Dreyfus and Mr. Barrett. This morning, the 5 Commission will be briefed by you, its representatives of 6 the U.S. Department of Energy, on the status of the Civilian 7 Radioactive Waste Management Program.

8 Back on June 9th of last year, Dr. Dreyfus and his 9 staff briefed the Commission on the High-Level Radioactive 10 Waste Program. Since that time, must has happened. Various 11 pieces of legislation that could affect this country's 12 high-level waste program have been considered in the 13 Congress.

Budgets for both agencies, both DOE and the NRC, have been reduced, and each agency has taken a hard look and is continuing to take a hard look at its High-Level Radioactive Waste Program.

A briefing such as today's can prove to be very beneficial in times of diminishing resources. The free exchange of information can allow each agency to optimize the utilization of its resources to carry out its responsibilities effectively.

Dr. Dreyfus and Mr. Barrett, the Commission looks forward to hearing from you today on the changes that have and are taking place in DOE's High-Level Radioactive Waste

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 Program.

£

2 Commissioner Rogers, do you have anything you 3 would like to add at this time?

4 COMMISSIONER ROGERS: Not at this point. Thank 5 you.

6 CHAIRMAN JACKSON: If not, you may proceed, Dr.7 Dreyfus.

8 DR. DREYFUS: Chairman Jackson and Commissioner 9 Rogers, I am pleased to have the opportunity to address the 10 Commission on the status of the program.

As has been the custom, I would like to start by showing you a few slides of the activity at Yucca Mountain, if we can get the first one up.

The Chairman will probably recognize our tunnel at Yucca Mountain. This is a view of the first turn. The tunnel has now reached a repository formation, and that is a view of the turn from the ramp down into the drift that will extend through the repository.

The second slide is the rear of the tunnel boring machine, and in this one, you can see the laser beam that is used as a guidance system to keep the machine on its intended alignment.

Next, this is a view of the mapping gantry on the tunnel machine. That platform up above is able to be held stationary while the machine is boring, so that the

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

scientist geologist can do mapping and sampling without
 stopping the machine.

•

One of the unique features of this machine -- of course, nothing like that -- is that it's used anywhere in normal mining or tunneling operations. It's one aspect of why we needed to purchase a unique machine.

Next one. This is a view of an alpine miner.
That is the business end of an alpine miner. We have
resorted to using alpine miners for the alcoves, the test
alcoves which are off of the main tunnel.

We had been doing those. I think when you were out there, you saw some that were done with drill-and-blast methodology, and this is a better methodology if we can make it work. It is a little less intrusive on the natural situation. It makes a much neater alcove, and we have been using this machine successfully and recently.

The next view is -- let me be sure what it is before I say it. That is the alpine miner in operation. That is the back of it and the spoil coming off of the back of the conveyer belt. That is actually drilling an alcove.

21 We have, I think, one more view of an alpine 22 miner. I am not sure why it is, indeed, a different alpine 23 miner, but when you have seen one alpine miner, you have 24 seen them all. We will put it up there, anyway. It is a 25 different alcove and a different miner we have been

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 operating, too.

Next one. This is testing in progress in one of the early alcoves, in Alcove Two. There are groundwater hydrology studies underway here looking at permeability changes across the Bow Ridge Fault which was the first major fault that we encountered on the way in, and those tests are in progress. Data is being gathered.

The last one, is a view of instrumentation of a 8 9 bore hole in the unsaturated zone. This, in fact, happens to be a bore hole in which Nye County is conducting research 10 and support and in a regulatory position. This is 11 monitoring establishing a baseline on pneumatic gas flow and 12 hydrologic conditions in the unsaturated zone. It is an 13 issue that the County is particularly interested in, and 14 they have been monitoring the changes in pneumatic 15 conditions as the tunnel progresses. 16

That gives you some feel for the fact that there is work in progress at Yucca Mountain. There has been progress since your visit. I hope you can make another one soon. We can show you pretty near two and a half miles of tunnel at this point, and it is a different experience.

As you observed, a lot has happened since I last spoke with you in June of last year. We are well into the new fiscal year operating under a much reduced budget that has required us to restructure our geologic disposal

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 program.

You have my prepared statement which I think is
comprehensive. I don't intend to read it to you, but I
would like to highlight a few pieces of it.

5 We are as yet without agreement between the 6 administration and Congress on any new policy regarding the 7 near-term management of spent fuel. Congress continues to 8 consider legislation to initiate construction of an interim 9 storage facility.

10 If that legislation is enacted, we would, of 11 course, be looking at another redirection of the program. 12 So, to the best of my ability at this point, I will share 13 with you our planning for the future of the program and our 14 response to the current fiscal year reduction.

We made substantial progress in 1995. We had a 40-percent increase, and almost all of it went to Yucca Mountain, and almost all of it was, in fact, utilized at Yucca Mountain. We completed the year with very little carryover and with accomplishments that frequently exceeded our targets.

We overcame the start-up problems with the tunnel boring machine, excavated more than two miles ahead of schedule and on the budget, and in fact, the ability to manage that machine better gives us some hope that we can do more in '96 with it than we have in our current baseline

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 plans.

The machine has past the point at which we will be putting the first in situ thermal tests. The thermal test alcove is being excavated with an alpine miner, and we expect to have an in situ heater test scheduled before the end of calendar year 1996.

7 The machine at present is about at the point where 8 we will have the alcove that will give us the first physical 9 access to the Ghost Dance Fault. We will drill through the 10 fault first to take samples of the situation as it now is 11 and eventually tunnel through the fault itself. I expect to 12 get substantial valuable information from that.

Progress to date on the tunnel has been important because it has enhanced and confirmed our understanding of site conditions. The tunnel has given us the first opportunity to confirm that those conditions we were imputing from surface operations and from drill holes are, indeed, what exists in the repository itself.

19 The Office of Waste Acceptance, Storage and 20 Transportation also made substantial progress over the last 21 year. We entered into the environmental impact statement 22 for the multipurpose canister. We did, in fact, complete 23 scoping and an implementation plan.

The contract for the design and certification was issued to Westinghouse in April, as I told you it would be.

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

Unfortunately, the decisions that the Congress made in the fiscal year '96 appropriation process have made it impossible for us to continue with that program, as we were pursuing it.

0

5 The Act provided only 400 million for the program 6 and further froze 85 million of that amount pending possible 7 future enactment of interim storage authority. So the 8 result is a program level of 315 million. That is just 9 about half of the 630 we requested, and it is 40 percent 10 below our actual fiscal year '95 level of effort.

In anticipation of a constrained budget, we did take action in September. We eliminated about 875 contracted jobs over this fiscal year in the September action, and primarily impacted Yucca Mountain.

15 In November when we found out about the unexpected 16 loss of the additional 85 million, we had an action which 17 will eliminate an additional 200 jobs, mostly in support of 18 the Waste Acceptance Program, program management functions, 19 support contractor functions.

We have throughout this situation -- while we were, of course, immediately constrained to manage the financial situation to avoid an overrun situation in '96, we have tried to preserve the vital program activities and to look ahead and preserve those things which we felt had continuity under a constrained budget.

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 A much reduced repository program will be 2 required. Congress did give us some guidance in the 3 Appropriation Act. They said that we should focus on the 4 core scientific activities at Yucca Mountain, and they 5 recognized that the preparation and submittal of a licensed 6 application would likely be deferred.

7 What new targets that are possible and practical 8 for us depends upon our future expectations for funding. So 9 the administration's fiscal year 1997 budget which is not 10 yet firm and which is still considerable flux within the 11 Department of Energy is a very important factor in what we 12 can aspire to do when we develop a new program outlook.

I want to make the point that the program currently is in a transitional state, managing down on the cash flow and doing what we must do, and we are doing a lot of contingency planning in the expectation of what I hope will be a more robust program when we know what the '97 outlook is.

19 The administration remains committed to geologic 20 disposal. However, given the funding that we already have 21 in '96 and the likely scenario for future funding, the only 22 practical approach that we see is to concentrate the 23 repository effort in the near term on the major unresolved 24 technical questions that we have to answer to complete the 25 conceptual design of the repository, describe its expected

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

performance, and indeed, that is the instruction that the
 Congress gave us in a conference report, to concentrate on
 the major unresolved, unknown issues.

In order to manage the program and in order to explain and justify our continuing activity to the stakeholders, we have defined a set of deliverables that are consistent with the conference report guidance.

8 They consist of a package -- these are near-term 9 deliverables -- consist of a package of more specific design 10 work that is focussed on those critical elements of the 11 repository and a waste package including a concept of 12 operations which I believe will show us that the 13 technologies do exist to build a repository in the concept 14 we have.

15 Secondly is a total system performance assessment 16 that will be based upon those design concepts and that will 17 capture the wealth of information that we already do have 18 from the 15 years of work that has already been done.

19 Third is a plan and cost estimate for the 20 remaining work beyond that time that would be necessary to 21 complete a docketable license with this application for this 22 Commission.

Finally is an improved estimate of cost necessary to construct and operate the repository, again based upon this refined design concept.

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

These deliverables when completed, I think, will give us a better understanding of the repository design and of its performance than we now have and a much better appreciation of work that is necessary to complete the license application and, indeed, the repository itself.

6 We believe we can complete that package of 7 deliverables in 1998 and have, indeed, committed with the 8 administration to do so.

9 We have named it, for want of a better name, a 10 viability assessment. I will be free to say that one 11 criterion of the name is that it not have term of art 12 significance in the law of regulations because, obviously, 13 this package doesn't.

14 CHAIRMAN JACKSON: Would you repeat that 15 statement, please?

16 DR. DREYFUS: I say the reason we have characterized -- we have to characterize what is basically a 17 package of deliverables that the Congress asked for some 18 way, and it was important to not characterize it with a term 19 of art that is in the statute or in the regulations because 20 it does not, in fact -- it is not concurrent, coincident, 21 with any particular one of the findings or formal actions 22 that are described in the Act. 23

It is a management target. The deliverables that contribute to it will clarify the most uncertain aspects of

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

geological disposal of Yucca Mountain. If the judgment is 1 positive, then obviously, the work that is done will also 2 contribute to the requirements for a formal secretarial 3 recommendation to the President, and subsequently, those 4 will contribute also to a license application to the 5 Commission, but the assessment will not be sufficient for, 6 nor will it prejudice, these subsequent formal actions by 7 8 the Department.

9 Some of those deliverables are necessary and are, 10 indeed, mentioned in the statute as part of the necessary 11 work to make a formal recommendation to the President, but 12 they are not everything.

For example, they do not include an environmental impact statement which is necessary both for the license application and for the presidential recommendation.

16 In order to complete the deliverables, we have to 17 document our understanding of site conditions, incorporating 18 the data we already have collected and the new information 19 coming very largely from the exploratory studies facility.

We have to have sufficient understanding of the critical factors affecting waste containment and isolation strategy to know whether the geological disposal is, indeed, technically feasible.

We will need to address the cross-cutting design issues such as the use of backfill, criticality control, and

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 thermal loading.

We think we can complete the deliverables by '98 because we can rely on an enormous amount of information already collected on site conditions, progress we have already made on the advanced conceptual design for the repository and the waste package, and the understanding that we gain from out latest total system performance assessment.

8 Now, although our focus in the near term is not on 9 the submittal of a license application, we recognize that we 10 must keep you and your staff informed and engaged and 11 preserve the integrity of the work that we are doing, so 12 that it can be used in a licensing process.

We expect that your staff will provide us with feedback, and if a significant technical issue is not adequately addressed, and failure to do so would affect our ability to continue toward licensing, that we will have the necessary interchanges to deal with that.

We expect to develop a revised program plan over 18 19 the next few months. It has got to be consistent with the 1997 budget presentation to the Congress, and therefore, it 20 cannot proceed ahead of the President's '97 budget, but we 21 22 will try to have it follow that as rapidly as possible, and it will describe our reconfigured program, and we, of 23 course, will keep you fully and continually advised as we 24 develop that. 25

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

Although the Congress has recognized repository licensing activities would be likely to be deferred under the reduced program, in our view, the long-range goal of a successful license application remains central to our mission, and we believe the program should include a plan and a target date for the submittal of a license application.

8 It is apparent from recent developments that any 9 such plan is going to have to recognize some limits on 10 funding because I think they are likely to persist.

I believe it is possible to move directly and efficiently from this viability assessment to the other work necessary for a license application if, indeed, we find that it is a viable venture.

15 The objective should be to design a repository 16 that is compatible with the geologic setting, to develop a 17 safety case to support a proposal to construct that 18 repository, and the licensing process should focus on 19 examining that safety case to determine if public health and 20 safety and the environment are adequately protected.

The rigors of trying to get to this funding level, while preserving the vital aspects of our work, have led us to reevaluate what needs yet to be done based on 15 years of experience, and I believe it is possible and probably necessary to revisit the regulatory framework for geologic

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

disposal, and more importantly, the related expectations
 that have given rise to earlier work plans.

I believe that the cost of submittal of a license application can be significantly reduced if the focus of the licensing review is on the safety case for a specific repository design and its predicted performance, less than on a comprehensive evaluation of the site.

8 If this were the case, I think we could aspire to 9 reestablish a target date for license application, not long 10 after 2000, and at the kind of funding that the Congress 11 might be willing to support.

12 This may be the only way the program can command 13 the resources to retain the geological disposal as a 14 national strategy.

Now, we have done a lot of planning. We intend to 15 explore this approach. We are considering the revision of 16 our own regulations which would be necessary to clarify our 17 intentions with regard to our future program. It would 18 provide a forum in which the discussion of what, indeed, is 19 the remaining necessary work could be done, and we will, of 20 course, keep you informed as we proceed with that process. 21 Briefly, with regard to the near-term management 22 of spent nuclear fuel, in the absence of an agreement 23

24 between the administration and Congress, we don't have new 25 policy direction regarding our role, and we have no access

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

to the 85 million that has been set aside for work on an
 interim storage facility.

Our contract to develop the multipurpose canister system was structured in three phases with three successive decisions. The first phase of the contract, system design, and preparation of a safety analysis report will be completed as scheduled by April of this year.

8 When I met with you last June, I indicated we 9 anticipated proceeding with phase two certification and 10 prototype testing. That will not be possible, and we will 11 not proceed with phase two.

12 The GA-4/9 legal weight truck casks were also 13 being developed in our program. Certification process is 14 underway. Safety analysis reports were submitted to the 15 Commission in July and August of '94. We are going to be 16 unable to provide additional funds for that process. 17 Private industry may choose to pursue the certification.

We will continue to work on credit for burnup at 18 least through the partial credit for actinide burnup stages, 19 and we aspire to remain in the burnup credit process because 20 we believe it is central to so much of the system, whether 21 or not the transportation and storage is done in private 22 practice or with a bigger role for us, and in any event, for 23 the repository. So we do intend to, as our funding permits, 24 continue with burnup credit activities, and we will 25

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 certainly continue with the partial burnup activity.

Of course, if the administration and the Congress come to agreement on policy direction regarding interim storage, the program is prepared to aggressively act on that direction.

6 We are looking at the issues of interim storage 7 licensing. We are looking at the issues of achieving the 8 capability for a very large-scale transportation venture, 9 campaign in the United States, and we believe we know how to 10 proceed once we are given the appropriate directions to 11 proceed.

I am grateful that the working relationship between our staffs has been strengthened. We have had a lot of hearings and a lot of interaction over 1995. I believe there were 30 meetings, staff meetings in 1995.

There will be fewer in '96 simply because of lack of resources. However, we are becoming more inventive at that. We intend to do a lot of video conferencing. We intend to remain engaged, and I think both of our staffs understand the necessity to figure out more economical ways to do that without sacrificing the relationship we now have.

I hope we can draw upon that experience to maintain progress on the work we are doing and, of course, to be able to respond to any new developments that may occur.

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 At that point, I will stop and take your 2 questions.

CHAIRMAN JACKSON: Thank you. 3 Let me go back to a couple of things. You 4 mentioned in your written submission as well as your remarks 5 today that you thought that there needed to be changes in 6 the regulatory framework, and I would like you to speak with 7 8 a little more specificity about that and what you have in 9 mind.

DR. DREYFUS: Well, from our point of view, the program has been evolutionary, and a good deal of the descriptive work on what ought to be done in order to have a complete site characterization venture was written, as you know, culminating in about 1987.

15 It also was done under a statutory regimen that 16 contemplated comparison among multiple sites, a future 17 selection of the preferential site, and a quite different 18 outlook than we now have.

19 So, informed by 15 years of site-specific 20 information as to what is important and not important at 21 Yucca Mountain and what the true problems might be and, of 22 course, informed by the notion that we are not, in fact, 23 comparing sites, but simply characterizing a site for a 24 particular repository, we ought to be able to do a better 25 job of describing what is important and what needs to be

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 done from here on out.

It is pretty clear that our own regulation, 960, is not held in high regard. I think that there have been expressions, including draft legislation in Congress to abolish it. It is time for it to be rewritten.

There also is always the notion that a program plan, as you change a program plan, is evolutionary, but somewhere along the way, it is appropriate to again restate what is the job and what needs to be done.

I believe there are factors in the historical literature that are no longer as significant as they might have been. There are things that we now know we can bound and dispense with, that we now know are not central to the safety case at Yucca Mountain, and I believe that we can describe a program that is a good deal less elaborate than the one that is described historically.

To what extent that affects the regulatory framework, I don't know, and until we get the description written down, until we can say to you this is what we plan to do, it would be hard for anyone to say whether that, in fact, is different from the expectations in your regulations. It is different from the expectations in our regulations. I can stipulate that at the moment.

24 So what we would propose to do is to look at a 25 program that we think will support a safety case for a

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

repository at Yucca Mountain, describe it, and then have the
 dialogue as to whether that, indeed, there are regulatory
 requirements that lay outside that plant. If there are,
 well, then there should be.

.....

We are not further than that. We are doing the planning to structure the program we think we need. We have had discussions on what the key technical issues are, that kind of thing which moves in the right direction, but I don't think we have made any commitments as of yet.

10 CHAIRMAN JACKSON: Under the new viability 11 assessment, to use the revised terminology or the 12 terminology in this particular case, are NRC and DOE looking 13 at the same technical issues?

DR. DREYFUS: Well, the list of technical issues that I have seen that have been discussed as technical issues, I think there is a disagreement as to the significance of a couple of them which is, I think, still being discussed, and then, of course, we are talking in a very high level of abstraction.

When we start to subdivide those, I would expect to find a larger degree of disagreement, but that, after all, is what we need to do. We need to know what the Commission thinks are the issues that have to be resolved in the licensing.

25

CHAIRMAN JACKSON: Let me see if I am paraphrase

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

or summarize what I think I heard you say. In doing this approach of what you call supporting the safety case, there seems to be three elements. One was a rewrite, a revision, or withdrawal -- that's my term -- of 10 CFR 960, the siting guidelines piece. Is that correct?

6 DR. DREYFUS: A restatement. Now, I don't know 7 whether that's what the format would be, but a restatement 8 of our proposed approach to completing the job.

9 CHAIRMAN JACKSON: The second -- okay. And I had 10 program plan changes. I mean, that is more broad than just 11 --

DR. DREYFUS: Program changes are definitely apart of the outlook, yes.

14 CHAIRMAN JACKSON: Third, the increased use of15 bounding.

DR. DREYFUS: In those areas, because we know better what our waste isolation strategy is and what our site is, in those areas, it appears now to be amenable with that sort of bounding, and in peripheral areas, it should be easier than in the central areas.

CHAIRMAN JACKSON: Let's focus on the second piece a little bit more in fleshing out what program plan changes you envision as being the most significant ones, that are different than what has been the case heretofore.

DR. DREYFUS: Well, that's the area, in fact, in

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

which until we write it down, we can't be very specific. I really am not in the position today to say we are dropping a specific item of work, and I aspire to have a document that says what we will do within the next couple of months. We are looking at that now.

6 CHAIRMAN JACKSON: Okay. So you are saying that 7 your feeling is that there have to be changes, but today, 8 you are not prepared to say what those changes should be.

DR. DREYFUS: That is right.

9

10 CHAIRMAN JACKSON: I note that DOE intends to 11 terminate work on the licensing support system. Yet, you 12 state that you have an aspiration to able to reinstate a 13 license application date soon after the year 2000.

14 The question is, in looking at your revised 15 program, are you going to be addressing -- or how can you 16 ensure that there is the availability of a licensing support 17 system or the kind of documentary information and data that 18 would be needed in a licensing process in enough time before 19 the submission of license application?

DR. DREYFUS: Well, the LSS is caught in this transitional thing that I mentioned. The first thing is '96 budget. In the '96 budget, as you recall, we had just reached the stage of having an accommodation and agreement among the user group and others, advisory bodies, as to what it ought to be and how it ought to be managed or coming to

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 the point of knowing what we were doing.

We had funded it rather healthily in the '96 2 request. So the first thing is that in the '96 budget we 3 got, we simply can't afford what we were going to do in '96, 4 5 and in the original response to the '96 budget, we said, whoops, licensing has now gone out over the horizon, and 6 that was, of course, the way it looked to us at the outset. 7 In some fiscal '97 scenarios, that is still the 8 9 I mean, I'm being a little optimistic, but the '97 case.

10 \_ budget will permit us to be more forthcoming.

11 So the first thing you see in '96 is that looking 12 at the constrained '96 budget and the expectation of much 13 deferred licensing, we deferred the LSS and would do nothing 14 with it now.

We are, in fact, struggling to hold our own systems together in the '96 budget. It is, indeed, a tough thing to manage to because not only is it a 40 percent reduction, but it is a 40 percent reduction and a bunch of termination costs that don't pay for new work.

20 So, when you look at what is available for new 21 work in '96, it is a lot less than 60 percent of what we 22 spent last year. So we just have a tough time this year.

Now, what we do in '97, I think, depends on what we can come up with. If we put a licensing date back in this program based on whatever the administration tells us

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

we can plan against, then yes, definitely, we have got to 1 get the LSS back into a time frame that will be adequate to 2 3 support that licensing date, and we are very cognizant of that, and there are a lot of things that have to go -- if we 4 put a licensing date in that is reasonably close to the year 5 6 2000, there are a lot of things that have to get back into the program in '97 when we get the money, and we are aware 7 8 of that.

9 So we are not going to try to do it without record 10 backup by any stretch.

11 CHAIRMAN JACKSON: No, no, no. I mean, I am 12 assuming that we all understand --

13 DR. DREYFUS: We all understand.

14 CHAIRMAN JACKSON: -- that that has to be there.
15 DR. DREYFUS: We will look very hard at the
16 timelines and be sure that we are not --

17 CHAIRMAN JACKSON: Well, there is also the issue18 of putting Humpty Dumpty back together again.

19 DR. DREYFUS: That's right.

20 CHAIRMAN JACKSON: So my real statement to you as 21 opposed to a question, which is what I usually do, is that 22 since you are talking about a change to program, as you are 23 doing that, that you have at least in the background the 24 fact that a licensing support system or something of that 25 nature has to exist --

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

DR. DREYFUS: Yes. 1 2 CHAIRMAN JACKSON: -- and that it can't go out of your thinking as you are developing --3 DR. DREYFUS: It has not. 4 CHAIRMAN JACKSON: -- a new program in response to 5 constrained resources. 6 Let me ask you this particular question. Since 7 the waste isolation strategy is noted for providing the 8 basis for organizing and explaining the rationale for the 9 more limited testing program, when will the completed waste 10 11 isolation strategy be made available to the NRC? DR. DREYFUS: We are working a draft. The 12 contractor's initial work is completed, and we are in the 13 14 process of the review of that draft. Have you got a date on when we will meet? 15 MR. BARRETT: Let me ask Dr. Brocoum if he would 16 want to venture. 17 DR. BROCOUM A couple of months, we are informed. 18 It is in the final stages of review in our quality assurance 19 20 program now. CHAIRMAN JACKSON: Let me ask you this question. 21 You also seem to be taking an approach that, in a certain 22 sense, will address the question of what can go right and, 23 you know, we're the regulators, and the question is will 24 this testing strategy permit you to realistically assess and 25

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

quantify factors that might detract from overall system
 performance, as well as those that enhance.

This is, again, when you are talking about a safety assessment.

5 DR. DREYFUS: Well, we certainly intend to totally 6 elucidate the safety case we make, and if there is a factor 7 that has significant impact, yes, we will have to deal with 8 it. We will deal with it either by demonstrating -- or it 9 does not have significant impact, or describing and 10 designing for it, one of the two.

11 CHAIRMAN JACKSON: At this point, can you say how 12 you feel a private initiative by industry on the 13 multipurpose canister development might interface or be 14 integrated into DOE's overall waste package design and 15 development activities?

You alluded to it in a generalized way.

There are a couple of things that 17 DR. DREYFUS: 18 are reasonably sure. The Congress sequestered the money we 19 would have used to pursue our own in-house technology development program, and as I read it, it said you will get 20 that money when you get a bill, and when I read those bills, 21 22 they say don't do canister work. So I see no eventuality in which I get the money and the permission to do the canister 23 24 work.

25

16

On that basis, we have -- looking forward to the

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

notion that there has to be the evolution and development of a suite of canister technologies in this country if we are going to move 3,000 tons of spent fuel a year -- we have to get that done through the private sector.

5 Now, since the canister program -- since we 6 announced our intention to stop the canister program, there 7 have been indications that industry intends to move into it. 8 There is a good deal of appreciation that there needs to be 9 a more comprehensive, more standardized storage and 10 transportation technology out there.

It hink people are beginning to realize that in the absence of that, we could create a situation in which dry storage is so varied and so site-specific, both economically and technically, it could create quite a management problem when the time comes to go and get it and move it, and I think that is appreciated in the private sector.

Now, the question is you are talking about \$100 million worth of investment, one way or another, to get these canisters built, and there is clearly a very large market and a very large economic incentive some day. The problem is nobody knows which day, and so capital funding for the development of these technologies has got to have some notion of when it is going to be returned.

25

I think there is going to be a lot of activity. I

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

think there is going to be -- there will be private ventures approaching the Commission for the certification of more comprehensive technologies capable of taking more of the fuel and probably at least due purpose, if not at least possible multipurpose.

-

6 We are getting a lot of inquiries about 7 specifications for storage and that sort of thing. So I 8 think yes, it is going to happen. What I am less sure about 9 is the timeline when somebody actually puts money on the 10 table and comes before you with a certification application. 11 That is a little hard to predict.

12 It will happen. We will when the time comes. We 13 are told we have a timeline. If we are given the job, we 14 will go out and look for transportation services, and those 15 who profess to supply them will have to have access to 16 technologies. That will create an incentive, and it will 17 happen. Whether it will happen prior to that incentive is a 18 question of how industry is guessing about the imminence.

CHAIRMAN JACKSON: I have some additional
questions, but I will defer them, and I would like to give
Commissioner Rogers a chance to raise some issues.

22 COMMISSIONER ROGERS: Thank you.

Just on this canister question, it does trouble me, though, that there might be the possibility that the canister program, a private canister program might start to

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

move quite rapidly for some reason, and the design submitted to NRC might be entirely licensable according to our requirements, but not necessarily fully compatible with what the repository design might anticipate.

2

5 It would seem very desirable that you ought to be 6 able to provide some guidelines from your point of view on 7 what those requirements on canisters, if they are going to 8 be placed in a repository themselves, some part of an MPC 9 system, that that is laid down early on, as early as you 10 can.

Even though you are not funding it and you are not supporting that work, it seems as if your ultimate design is going to have to take into account what those things are going to look like and what their characteristics are going to be.

We might be able to very well license something that really doesn't quite fit the final design of the repository because it is entirely safe for other purposes, but maybe not entirely suitable for your ultimate repository design.

It seems that it is very important to try to make sure that there isn't a disconnect there. As you cut off your support for the financial support, it doesn't seem to me that you really can cut loose entirely from design considerations of those canisters for your purpose, and I

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 would just welcome any comments you might have on that.

DR. DREYFUS: Well, as we have said in previous 2 appearances here, the ability of the canister to be utilized 3 in the waste package has always been something that had to 4 5 be decided when you got to that point, and we were seeking 6 from the Commission an expression that our design in no way a priori prohibited the use of it in a waste package rather 7 than a certification at this point that it would be okay, 8 and I think we had a mutual understanding that was 9 10 impossible to do at the moment.

Now, yes, we will facilitate to the best that we can the development of a multipurpose canister. We will tell the industry what we can tell them about what specifications would be required.

It is not clear to me that the different scenarios 15 16 of the future inherently make a multipurpose canister the economic bet, and therefore, we're going to see, and now 17 that we're going to do it through the marketplace, very 18 clearly, whatever the economic bet is, is what will come 19 In other words, if we are going to have a scenario 20 forward. extensive interim storage, that gives you one kind of 21 If you don't, it gives you another. It is going 22 economics. to be a little more a question of the economic outlook, I 23 24 think the shorter-term economic outlook, that being the way the marketplace works. We will do the best we can. 25

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 COMMISSIONER ROGERS: It is a worry that that by 2 itself might dictate something that in the long run may give 3 a problem with a repository.

DR. DREYFUS: We have been approached, and we are going to do the best we can to provide guidance, so that should vendors wish to try to accommodate the waste package, they will have the best shot at it. That is all we had is a shot at it. So we will do the best we can.

9 I understand the problem, and I am concerned about 10 it.

11 COMMISSIONER ROGERS: Let me just say, in general, 12 I think your approach really is very impressive. You are 13 dealing with a very tough problem with your budget cuts, but 14 it seems to me that the approach that you are taking on this 15 viability assessment makes an awful lot of sense.

16 It might even be the way that the whole thing 17 might have gotten started a long time ago if one could have 18 seen how to proceed in a clearer light.

19 So I personally find it a very interesting 20 approach. However, I do have some problems in that I think 21 that once you have come to the -- and I think the Chairman 22 sort of touched on this. The viability assessment, it seems 23 to me, is really taking into account all of the positive 24 aspects of the site, your design, and so on and so forth, 25 and seeing when you put them altogether, do you wind up with

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

something that seems to make some sense and that it looks
 like a totally -- at that point could look like a totally
 viable approach.

It may be not so different from actually some work 4 that has been done in the past on this. I don't know. 5 However, there will be serious questions raised at that time 6 on all sorts of possibilities, and I think your statement 7 8 that it ought to be easy to move from the viability assessment to license application is one I am not sure I can 9 agree with because it seems to me that is really where the 10 11 problems are going to start to surface.

12 The viability assessment may look very good from 13 your point of view. You may have a total design. You may 14 have all the elements in place that might seem to make very good sense to you and all fit together. However, there will 15 be questions raised, and some very tough questions may very 16 well come up at that point, and that is not -- then they are 17 going to have to be dealt with, and they will involve 18 technical matters. 19

I think that unless there is some legislation that says all of such things must be ignored, that the process is going to be a complicated one from then on. I think what you are doing right now makes a great deal of sense. It looks like a very sensible engineering approach to trying to come to a solution here.

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

However, that is different, as you know, from
 achieving a license, and licensing is not just simply a
 collection of engineering judgments. It is much more than
 that.

. .

5 I just feel uncomfortable about the idea that one 6 can move quickly from a rosy viability assessment that looks 7 pretty good to a successful licensing application without a 8 good deal more work of some sort. It may even just be 9 legal. I don't know, but there will be technical issues as 10 well, I am sure.

11 So I am concerned about the documentation. It comes back to the LSS question, in a sense, not from the 12 standpoint of total access by everybody that might have a 13 14 right to access the LSS and so on and so forth, a very big comprehensive system, but rather, some ongoing means for 15 documenting, and if I can use the word -- I don't like it --16 memorializing decisions that are made along the way with 17 respect to how much data has already been collected and how 18 much data might be necessary in the long run. 19

It is going to be years down the road before one has to return to what was the basis for stopping at that particular point in the collection of some data, and I think that documentation there is extremely important and some way of preserving it.

25

To me, this is one of the features of the LSS that

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

has always justified its existence. So that, I know you 1 have said you are not going to forget about the data, but I 2 do think that it is very important that every kind of 3 decision -- tentative decision because we have said many, 4 many times, no decisions from the Commission's point of view 5 are final until all decisions final, but nevertheless. from 6 your point of view that when you proceed to a certain point 7 in your viability assessment, you say that is as far as we 8 have the funds to go, and we think it is far enough, and 9 then you move on to something, that that is well documented 10 11 and well recorded, so that 10 years from now when you have to resurrect it, it is not a hard thing to do. 12

7

13 So that seems to me that that aspect of the LSS 14 cannot be simply turned off, and you know you have to deal 15 with it whether you call it LSS or you call it something 16 else entirely. It is of no great moment to me, but the 17 notion that the preservation of decisions with respect to 18 the collection of data are extremely vital for the future.

19 I am not going to have to be dealing with it. 20 Maybe none of us in this room will ever have to be dealing 21 with it, but somebody will have to, and at that point, you 22 don't want to run into a stone wall.

23 So that, I just guess that while I like very much 24 your approach and I admire the progress you have been making 25 and how you are approaching the financial problems, I don't

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

think that it really is intellectually defensible to say
 that one can defer licensing considerations. Licensing
 considerations are what you are into right now, every day,
 in a sense.

5 You may ultimately decide not to even apply for a 6 license, but if you do, then what you do right now is a 7 vital part of licensing in the long run.

So it is a guestion of degree, of course, but I do 8 think that it is very important to give vital consideration 9 to the guality assurance question which relates to the 10 documentation. That is always going to be the one in the 11 long run that will be vital in a licensing decision or a 12 challenge to a licensing decision, and one cannot forget the 13 vital nature of that not necessarily right now and maybe not 14 in coming to your viability assessment, but ultimately in 15 dealing with the finalization of a license application. 16

So I just commend your work very much. I know you 17 have been struggling under enormous difficulties, and I 18 think you have got a very clear sense of how to proceed 19 here, but I do just come back to this point that the 20 documentation and quality assurance questions are just as 21 important in the long run as anything else that you do, and 22 somehow you have to find a way to see that they are not 23 lost; that there is no disconnect as you proceed along 24 25 because a gap, a vital gap in information and records could

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 be fatal in the final analysis.

Thank you.

2

3

CHAIRMAN JACKSON: Thank you.

I have kind of one follow-on, and in a certain sense, one could argue in the same vein of not losing Humpty Dumpty here.

How do you intend to handle the issue, the fact 7 8 that the Nuclear Waste Policy Act, as amended, requires that in the recommendation of the Secretary to the President 9 vis-a-vis Yucca Mountain suitability, that there is a 10 11 requirement for an environmental impact statement, but all 12 work based on budget constraints on that is disappearing? 13 So if, in fact, this site is found to be viable in 1998, how 14 do you intend to address -- how do you intend to have that issue addressed? 15

16 DR. DREYFUS: Yes. That goes back to, I think, the note I made that you say I said it was easy to move from 17 the viability assessment of the license. I meant that in a 18 sense that the viability assessment is a subset of what we 19 20 need for the -- further, both the presidential recommendation and the licensing, not that it was easy in a 21 workload sense because the amount of work necessary between 22 that viability assessment and a license application is a 23 24 critical question of whether we ever get there or not or how long it takes. 25

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 What again is transitional is that our current 2 baseline work plan at Yucca Mountain does not contemplate 3 moving to licensing on the timeline. It contemplates 4 reduced funding, getting the funding under control, getting 5 the expenditures under control, preserving vital functions, 6 and doing the viability assessment.

7 In that mind set, which is the mind set we entered 8 '96 in when we were not sure at all how hard it would be to 9 get hold of the financial side of it, we were not 10 considering getting back on a licensing track in any short 11 period of time. So a lot of this stuff the moves out.

Not documentation. I fully agree that you do not stop preserving the integrity of the data you have got, and you have got to archive and you have got to have retrieval capability and you have to maintain quality assurance, but the rest of it, the workload stuff, the EIS, LSS, loading and all of that stuff was viewed as "we will do that later, if...."

Now, as we went through this process, we got a little more hopeful that we could hang on to more of the program. We had a very good year in '95. '95, a whole lot of stuff came to fruition that had before been scattered data.

The performance assessment was very, very significant, and the tunnel itself confirmed a great deal of

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1 what before was just hypothecy.

2 So '95 was a very big year, and when we started 3 looking at it, we said maybe there is more done than we 4 thought. Maybe we can, in fact, aspire to licensing in the 5 near term.

6 The key is you have got to have a budget level 7 that permits you to do things like the LSS and the EIS. If 8 we get it, then what we would do with the EIS is we would 9 restart the EIS sufficiently to make that timeline work. 10 Whatever the date of the presidential recommendation is, we 11 have got to back off it the appropriate length of time for 12 an EIS, and we have to restart it.

We did the scoping, and we suspended it. For all practical purposes, what it basically means is that if we get a budget that will permit it, we would restart that in the '97 time frame in order to have it ready in time for a formal recommendation.

We would also have to complete a design. A design that we are looking at for the viability assessment is concentrating on those aspects of the design that are critical to performance assessment. In order to have a design for an application, it has to be comprehensively up to the same level of sophistication, and that would require that we restart some of that work.

25

:

So there is a lot that has to be restarted.

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

CHAIRMAN JACKSON: Well, I think you have laid out 1 2 your own challenge here. I mean, obviously, you know that from our perspective the kinds of safety assessments, 3 performance assessment tied to safety that would be 4 5 necessary for licensing is a particular focus of ours, but what I would say to you is that in laying out these -- what 6 I'll call them, the three bullets that I discern constitute 7 the basis of your viability assessment approach at this 8 9 moment -- you talked about the increased use of bounding, and I would just say to you that in order both to be in a 10 11 position to submit a license application that is complete, one can't lose sight of issues having to do with the 12 documentary record, and then in terms of what the Nuclear 13 Waste Policy Act, as amended, requires in terms of 14 environmental impact statement. 15

So all I would say to you is that if you take 16 these and related issues in terms of how you do and work out 17 your revised program, that you should take them as part of 18 19 increased use of bounding, so that you are not creating something that when one is back on to a licensing track that 20 one ends up having to redo a lot of material; that in 21 22 designing your viability assessment to respond to budgetary constraints and what you have to take back to the Congress, 23 24 that you understand that it is happening within a ceratin phase space that you also have to respond to down the line. 25

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

So it is pay me now or pay me later, but you know
 you have to pay.

DR. DREYFUS: Yes, indeed.

3

CHAIRMAN JACKSON: Unless Commissioner Rogers has
any other questions or comments, Dr. Dreyfus and Mr.
Barrett, I would like to thank you and your staff for taking
the time to come to brief the Commission on this very
important topic.

9 The information and the exchange that we have had 10 today will be of great assistance to us in developing and 11 modifying our own high-level waste program here at NRC. We 12 have our own constraints and decision-making.

13 Clearly, this whole area is undergoing significant 14 change whose endpoint none of us can quite see at this 15 point, but I believe that in times of reduced resources, it 16 is more than ever important.

I didn't really question you about this, but you talked about changes in interactions with the NRC, and I am, of course, curious as to what those changes are, but the lines of communication have to be kept open, and I think this kind of inherent programmatic bounding that we have talked about has to be kept clearly in mind.

Again, I thank you for an excellent briefing. Unless you have any further comments you would like to make, we stand adjourned.

> ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034

1	DR. DREYFUS: No.
2	Thank you very much.
3	CHAIRMAN JACKSON: Thank you.
4	[Whereupon, at 11:10 a.m., the briefing was
5	concluded.]
6	
7	• · ·
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

:

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1250 I Street, N.W., Suite 300 Washington, D.C. 20005 (202) 842-0034 .

.

# CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING BY DOE ON STATUS OF HIGH LEVEL WASTE PROGRAM - PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

3

DATE OF MEETING: Tuesday, January 30, 1996

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: Jennie Mally

Reporter: Mark Mahoney



POLICY

SECY-96-020

January 30, 1996

(Information)

FOR:

FROM: James M. Taylor Executive Director for Operations

<u>SUBJECT</u>: LICENSING SUPPORT SYSTEM PROGRAM ADMINISTRATION -SEMIANNUAL REPORT

#### PURPOSE:

To inform the Commission of the status of the Licensing Support System (LSS) and the activities of the LSS Administrator's (LSSA) staff for the six-month period ending December 31, 1995.

## **BACKGROUND:**

Manual Chapter 0109 requires that LSS status reports be sent to the Commission on a quarterly basis. The Commission's Staff Requirements Memorandum dated January 31, 1992, revised the report's frequency to semiannual. Additionally, a Staff Requirements Memorandum dated June 28, 1995, directs that the Senior Management Team (SMT) provide a report on the LSS before finalizing a Memorandum of Understanding (MOU) with the Department of Energy (DOE), before launching a pilot program, or before finalizing the LSSA's Compliance Assessment Program documents. This report addresses the status of these initiatives as well as providing a summary of activity during the last six months. The scope of this report includes all LSS program activities.

The Executive Director for Operations established an LSS Senior Management Team in February 1995 to review the original objectives of the LSS, evaluate the impact of current factors on the LSS, and recommend future strategy for the LSS. As a result of several SMT meetings, SECY-95-153, Licensing Support System Senior Management Team Recommendations on Direction of the Licensing Support System, was issued on June 4, 1995. The six recommendations described in SECY-95-153 were considered by the Commission. The Commission directed that the SMT should report back prior to finalizing the MOUS, proceeding with the pilot

Contact: D.J. Graser, IRM/LSSA 415-5507 NOTE: TO BE MADE PUBLICLY AVAILABLE IN 5 WORKING DAYS FROM THE DATE OF THIS PAPER

program or making final decisions on which documents would be included in the LSS. The Commission noted that Congressional developments regarding NRC's and DOE's authorizations or appropriations might require future adjustments.

#### **DISCUSSION:**

÷

# Impacts of Congressional Budget Action

DOE's Office of Civilian Radioactive Waste Management (OCRWM) had originally formulated an FY 1996 budget in excess of \$600 million for the High Level Radioactive Waste Management Program. The final authorization for OCRWM was \$400 million, with \$85 million of that amount being "fenced off" for interim storage pending a congressional revisit of the Nuclear Waste Policy Act sometime in the spring of 1996. Additionally, the conference report on the Energy and Water Appropriations Act for FY 1996 emphasized that DOE expenditures should be limited to site characterization activities rather than licensing activities. Arguably, development of the LSS could fall within the spending limitations for "licensing" activities. The impact of this scaled back appropriation brought all DOE's LSS related activities to a complete halt with the start of the new fiscal year. DOE contractor staff involved with LSS design and development were disbanded, and DOE's LSS Advisor Review Panel (LSSARP) representatives were instructed by their management to not expend any further time on the LSS.

A collateral effect was that the LSSA's initiatives for finalization of LSS system functional requirements, the finalization of a MOU, and the development of a prototype system were all halted due to lack of DOE availability. An LSSARP meeting scheduled for December 1995 was postponed because DOE representatives could not commit to attending and because most of the affected units of local government had not been provided any FY 1996 funds for oversight of DOE's High Level Waste (HLW) activities.

The LSSA was able to complete the Participant Commitments and Compliance Assessment Program, but was unable to present the finished products to the LSSARP when the December meeting was postponed.

The status of other products and activities is further detailed in the following sections.

# 3

### LSS Advisory Review Panel Meetings

The LSSARP held a meeting on July 6 and 7, 1995, at the Oneida Nation Reservation in Green Bay, WI.

- Panel members were provided a briefing on pending legislation concerning the civilian nuclear waste program.
- Discussions were held regarding the use of an NRC system, NMSS' Technical Reference Document Database System (TDOCS), and its collection of documents on DOE's Multi-Purpose Canister (MPC) as a pilot environment to test LSS functionality. LSSA staff completed an analysis of the LSS functionality compared with that available in TDOCS and provided that information to the DOE staff responsible for LSS design and development in early October. The LSSA staff concluded that the TDOCS system could reasonably meet most of the search and retrieval functions of the stated LSS requirements, but not all of the electronic submission and docketing functions. LSSA staff additionally concluded that there was some potential for size limitations.
- Panel members were informed of the status of DOE's efforts to develop descriptive statements about intended LSS functionality that can be used by ADP system developers. These statements are also known as the LSS Phase 2 Functional Requirements. Plans were made to close the comment period afforded to the LSSARP by August 1 and allow DOE to develop a finalized document. That finalized version was circulated to LSSARP members in August, NRC provided final commentary in mid-August, and DOE responded to NRC's commentary by mid-September. DOE plans to conduct a survey of commercially available systems were discussed. This survey would allow DOE to determine whether it would be more cost effective to integrate components with in-house staff or to acquire an existing product. Completed products from the functional requirements statement and the competitive market survey were to be delivered at the planned December LSSARP meeting.
- The LSSA reported on the status of a MOU between DOE and NRC and comments and clarifying suggestions on the first draft were offered by Panel members.
- Panel members were provided with the LSSA's latest drafts of the Participant Commitments and Compliance Assessment Program documentation and the LSSA requested their final comments by the end of August. Completed products were to be delivered at the planned December LSSARP meeting.

• Additional discussions were held in the areas of Yucca Mountain data sharing, access to the DOE records system by participants, the status of DOE document reprocessing, and technical aspects of document scanning versus electronic file conversion.

### Senior Management Team (SMT) Review of DOE Records Management

In response to an informal DOE request at the March 22-23, 1995, LSSARP meeting and subsequent discussions, the LSSA made a recommendation at the July 7, 1995, LSSARP meeting for a field visit to DOE's records management facility. NRC's SMT subsequently visited OCRWM's Management and Operating (M&O) contractors who perform DOE's records management functions. The objective of the meeting was to review DOE's records management approaches in order to identify opportunities for DOE to focus their relevancy/inclusionary criteria and thereby reduce the volume of pages they intended to submit to the LSS. The SMT visit of July 20, 1995, identified issues in the areas of cataloging procedures integrity and accuracy, records package reconstruction, referenced document availability, retention of non-DOE authored materials, retention policies exceeding normal NARA retention schedules, and, deficiencies in decision tracking.

The SMT concluded that DOE was retaining several times the number of pages that appeared to be necessary to support the licensing process. Another initial impression was that DOE was not documenting its decisions to the extent NRC expects to be needed for licensing. However, this impression was not sufficiently reliable to form the foundation for SMT actions at that time. [A summary of the SMT findings is included with this report as Attachment 1.]

#### Compliance Assessment Program

The LSSA received final comments from LSSARP panel members on three documents which essentially complete the LSS Compliance Assessment Program (CAP). The three documents finalized on 12/28/95 were: LSSA Guidance on the Format and Content of LSS Participant Compliance Program Plans, LSSA Participant Compliance Program Plan Certification Document, and, the LSS Participant Commitments. Final action on the Compliance Assessment Program is being held in abeyance.

## Memorandum of Understanding

DOE delivered a version of the MOU outlining responsibilities for design, development, acquisition and implementation of the LSS to the LSSA on September 25, 1995--four days before the end of the

fiscal year. This version was characterized as one which the DOE's LSS point of contact felt comfortable taking to DOE management to see if they would concur. The LSSA was satisfied with this version of the MOU and was preparing a report to the Commission when DOE stopped the process of presenting this version to their management, effective with the end of FY 1995. Final action on the MOU is being held in abeyance.

#### Prototype

Ŧ

NRC evaluated the reusability of NMSS' TDOCS as a prototype using MPC documents. The evaluation was delivered as DOE was ceasing all activities related to investigating candidate hardware and software for the LSS (make-vs-buy). The SMT continued to pursue the viability of making TDOCS externally accessible to LSS participants by establishing Internet access to the MPC document holdings of TDOCS. However, the funding reductions taken by NMSS in the FY 1996 funding appropriation have caused this effort to be assigned a lower priority and the efforts to provide external access are now on hold.

# Topical Guidelines

The Regulatory Guide providing the Topical Guidelines for the LSS was prepared in final form and placed in concurrence around late January or February of 1995. When the package reached the EDO's Office, the Commission was establishing the NRC SMT to oversee the LSS. The EDO decided to send the package back to the SMT while they established their Charter, and it has not yet been forwarded to the Commission pending the conclusion of the SMT work on DOE's document submission volume estimates.

### Funding Mechanism

DOE did identify two likely mechanisms to provide funding to NRC for the LSSA's activities. Definitization and validation of those approaches was not pursued by DOE after the first week of August 1995--when DOE first anticipated that there would be no FY 1996 LSS activities.

#### Prospects

• Congressional committee chairmen are optimistic that the Nuclear Waste Policy Act will be revisited this spring. The outcome of that effort is, however, unpredictable. Failing success in its springtime efforts, prospects for congressional action once the campaign season begins are not good.

c

7

- Early FY 96 indications were that DOE will delay its license application until sometime beyond the year 2001.
- In the meantime, DOE's ongoing site characterization work will continue to generate new documentation.
- The abrupt halt to progress on the LSS since the start of FY 1996 clearly demonstrates NRC's dependance on DOE funding to sustain any automation progress.

The license application for a HLW repository, for interim storage, and cask certifications are all still eventual prospects confronting NRC. The LSS is not an end in and of itself but does represent Commission intentions to be prepared for a streamlined, cost-effective, and expeditious license application hearing. These are still worthy objectives regardless of the prospects for, and uncertain outcome of, anticipated congressional action.

Given the SMT findings in its initial review of the DOE records system, DOE's cancellation of LSS activities and records reprocessing raises concerns about their ability to effect timely and cost-effective remedies to SMT concerns on an ever-growing collection of materials. Likewise, DOE budgetary resources are insufficient to support the prototyping of participant access to licensing information. These factors suggest that this is an opportune time for the SMT to refocus DOE on the documentation needed for its license application, assess radical developments in computer communications and internetworking, address a major refocus of licensing and cask certification activities, and, reexamine the foundations and assumptions upon which the LSS rule is based.

The SMT will address these issues, develop an action plan and advise the Commission within the next six months. This effort will include a reassessment of the requirements for a licensing support system as prescribed in the LSS rule.

James M. Waylor

Executive Director for Operations

Attachment:

Summary of Findings from SMT Visit to DOE Records Management Facility on 7/20/95

DISTRIBUTION:		
Commissioners	OCA	
OGC	ACNW	
OCAA	EDO	
OIG	SECY	
OPA		

ATTACHMENT

# SUMMARY OF FINDINGS FROM SMT VISIT TO DOE RECORDS MANAGEMENT FACILITY ON 7/20/95

÷ '

CATALOGING PROCEDURES INTEGRITY AND ACCURACY: We noted that the DOE cataloging procedure for records packages that the bibliographic header field for Related Record was not completed for any of the parent child relationships within that records package. The package being viewed had seven items in it. One of the items was a one page transmittal letter indicating that it transmitted the audit notification as an attachment. It was cataloged as an item, and the header for that item indicated no related record. The following item in the records package was the referenced attachment. The bibliographic header for that item contained nothing in its Related Record field to show that it was the attachment to the previous transmittal. If carried over into the LSS, you would see an image of an item that says it has an attachment, but, the bibliographic entry does not give you the DOE accession number for the item that is the attachment. This item needs to be addressed by the LSS header working group.

<u>PACKAGE RECONSTRUCTION</u>: We noted that the packages are only identifiable via use of the Package Identifier. The Related Record field was not completed for any of the reciprocal relationships between the header record for the table of contents and the seven items that make up the package. This appears to be because of DOE identifying a package as a single entity. The Package Identifier will allow the reconstruction of the items in a package only by performing a second iterative search for all items where Pkg ID = nnnnnn. This item needs to be addressed by the LSS header working group.

<u>REFERENCED MATERIALS:</u> Until the December 1994 ARP meeting, DOE did not have guidance on what constituted readily available items. As a result, referenced items such as geologic dictionaries and chapters from textbooks are included as attachments to some of the documents we reviewed. It should be expected that DOE will screen these materials out during their reprocessing efforts based on the direction given by the ARP on what constituted readily available. No additional NRC guidance should be required of NRC to allow DOE to implement this screening-out criteria.

NON-DOE AUTHORED MATERIALS: There were numerous examples of documents authored by other organizations which were found in the examples reviewed. EPA, NRC policy and guidance documents, federal register, federal rules, federal regs and other similar materials were found. DOE may choose to include these in their records system for reasons unrelated to licensing documentation requirements, and that is their business. However, if DOE is allowed to dump the entire contents of their automated records holdings into the LSS, it would cause a situation where DOE is submitting other participants materials. On the one hand, it is the other participants' responsibility to enter their own materials, but on the other hand, DOE is not confident that other parties will be submitting their documents which DOE feels it might rely upon. DOE's tracking, at the 11th hour, whether other participants documents made it in adds a responsibility on DOE that is equally shared by others (i.e., Nevada relying on DOE documents...) But the burden on DOE is perhaps larger by magnitudes and the risks are against their license application's success.

5

:

[A filtering search on the DOE records system holdings for all items where the AUTHORG = NRC or NEV or CLARK or NYE. . . could preclude those from being bulk migrated into LSS; but the cataloging problem is that each one of those that was part of a reciprocal cross reference will result in a dead end pointer in LSS. DJG]

**DOE DOCUMENT DISPOSITION SCHEDULE:** An SMT member observed that DOE seems to be maintaining high-level radioactive waste (HLW) records beyond the disposition period recommended by the National Archives and Records Administration. He asked the M&O contractor why is DOE changing (extending) the normal disposition schedules, just for HLW records? He suggested that NARA retention schedules may supersede other requirements. A representative of the M&O noted that only 3-5 percent of the RMS collection are considered to be Permanent Records by NARA. This issue may be need further consideration.

**DECISION TRACKING:** After reviewing a random selection of DOE documents, an SMT member observed that, unlike NRC's policy to capture the concurrence signature blocks, DOE is not tracking the decision making process. He observed that there is no discernable way to determine whether a senior manager had actually reviewed a particular document. There is no clear sign off process on the administrative documents. In response, a representative of DOE noted that the LSS is a discovery support system, not a litigation support system -- if the LSS was supposed to be an issues tracking system, it should have been stated in the rule. There is a disconnect here that may need further clarification.

[In the DOE system, the concurrence block is filmed/imaged. A two page letter will be imaged as 3 pages, the two pages as the document went out plus a duplicate of the last signature page with the superimposed concurrence chain signed and initialed. You will only see it if you pull up the document image. DJG]



# Department of Comprehensive Planning Nuclear Waste Division

CLARK COUNTY GOVERNMENT CENTER 500 S GRAND CENTRAL PKY STE 301? PO BOX 551751 LAS VEGAS NV 89155-1751 [702] 455-5175 FAX: [702] 455-5190

January 17, 1996

-5

Mr. John Hoyle LSSARP Chairman U.S. Nuclear Regulatory Commission Mail Stop 16 H 3 Washington, D.C. 20555

# SUBJECT: LICENSING SUPPORT SYSTEM INTERACTION

Dear John:

This correspondence is intended as a follow-up to the excellent meeting we had in December. As you may or may not be aware, oversight funding for the State of Nevada and affected units of local government will probably not be available for FY 1996. This places Clark County and others in the difficult position of having to monitor on-going site characterization activities, for as long as we are able, with our remaining FY 1995 funds.

While the current budgetary constraints will, undoubtedly, make it impossible to develop a Licensing Support System (LSS) as originally envisioned, I feel that it is important to continue discussions on the process of managing data to facilitate licensing review in the future. The need for the systematic collection and organization of the increasing amounts of information that continue to be generated is as critical as ever.

From our standpoint, the early implementation of an LSS-like system is imperative given current or future oversight requirements. The continuation of efforts of such a system, even on a reduced scale, is still essential.

I hope that, with your cooperation, we can continue to work towards the development of a system designed to the standards envisioned in the original LSS rule. The Department of Energy (DOE) must also be encouraged to at least tailor their current document control system to facilitate future transfer to an LSS-like system in a timely and cost-effective manner.

While budget constraints will prohibit Clark County and others from attending meetings, in Washington, D.C., at least in the short term, we can still discuss these issues by conference call, or perhaps by using DOE's videoconferencing capabilities.

If there is interest in continuing LSS discussions, a partial list of topics could include the following:

Mr. John Hoyle January 17, 1996 Page 2

?

- 1. The Status and future of the LSS.
- 2. DOE's current thinking with respect to data management for licensing.
- 3. LSS maintenance issues
- 4. The future role of an LSSARP.
- 5. Public involvement and access to licensing information.

Let's discuss this and set up a time for a meeting. If you have any questions please contact Engelbrecht or me at (702) 455-5175

Sincerely, nnis A. Coordinator

cc: Engelbrecht von Tiesenhausen 10hoyle.db