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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the matter of:

COMMISSION MEETING

Briefing by DOE on  
Status of High  
Level Waste Program

(Public Meeting)

Docket No. 86

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Location: Washington, D. C.

Date: Tuesday, July 15, 1986

Pages: 1 - 50

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rec'd w/ briefing by  
DOE on status of High-Level  
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mtg. 109  
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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BRIEFING BY DOE ON STATUS OF HIGH LEVEL  
WASTE PROGRAM

- - -  
(Public Meeting)  
- - -

TUESDAY, JULY 15, 1986  
1717 H Street, N.W.  
Washington, D.C.

The Commission met, pursuant to notice, at  
2:05 p.m., the HONORABLE LANDO W. ZECH, JR., Chairman of the  
Commission, presiding.

COMMISSIONERS PRESENT:

- LANDO W. ZECH, JR., Chairman of the Commission
- JAMES K. ASSELSTINE, Member
- THOMAS M. ROBERTS, Member
- FREDERICK M. BERNTHAL, Member

1        STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:

2                S. Chilk

3                B. Rusche

4                W. Parler

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## P R O C E E D I N G S

CHAIRMAN ZECH: Good afternoon, ladies and gentlemen. Commissioner Roberts will join us shortly.

The Commission will be briefed today by Mr. Ben Rusche, Director of the Office of Civilian Radioactive Waste Management in Department of Energy. This briefing is a continuation of a series of briefings by the Department of Energy aimed at keeping the Commission aware of recent developments of the Department's High Level Nuclear Waste Repository Program.

A number of milestones have occurred since our last briefing, including the selection of three candidate sites for the first geological repository for spent nuclear fuel and high level nuclear waste, and a concurrent announcement to postpone the second repository program, of which the Commission is very interested in hearing about.

Unless any of my fellow commissioners have an opening statement they would like to make, I'll ask Mr. Ben Rusche to proceed.

MR. RUSCHE: Mr. Chairman and members of the Commission, I'm delighted to have a chance to visit with you again today. I think this continuing series of opportunities affords us and hopefully you an occasion for us to discuss in a very general way the activities that are underway in the Department's High Level Waste Program.

1           What I propose to do with your permission is to  
2 spend a few minutes and very briefly touch on a number of  
3 items that have to do with status and areas of current  
4 activity and relevance, and then hopefully have a few minutes  
5 to suit any particular interests you have. I can expand on  
6 those or perhaps discuss topics that I haven't thought about.  
7 And if that's agreeable, let me start.

8           CHAIRMAN ZECH: That sounds fine.

9           MR. RUSCHE: Your opening comment recognized,  
10 Mr. Chairman, that since we last talked we have made  
11 considerable progress evidenced by the President's decision to  
12 select three sites; a site in Nevada, one in Texas and one in  
13 Washington State as sites for the purpose of characterization,  
14 detailed characterization of those sites for the nation's  
15 first geologic repository for high level waste and spent fuel.

16           The determination by the President and his selection  
17 of these three sites culminates years of work that have gone  
18 on in this country, toward the objective of safe and  
19 environmentally acceptable disposal of such waste. I think  
20 that reaching this stage of development permits us the  
21 opportunity to look ahead to the future now in a mode of  
22 operation that will hopefully be more aimed at the carrying  
23 out of the investigation, evaluation and detailed geologic and  
24 safety and environmental activity at these sites, having  
25 passed beyond the crucial decisions of deciding which of those

1 sites to focus our attention on.

2 The Commission will recall that we published  
3 environmental assessments supporting the Secretary's  
4 nomination of five sites, these three plus a site in Utah and  
5 a site in Mississippi. The decision, in effect, begins a new  
6 phase of work. The characterization activities at each of  
7 these three sites will result in the expenditure of somewhere  
8 in the neighborhood of \$1 billion for each of the sites over  
9 the next five or so years, for the purpose of providing  
10 information for the Department and for the Commission to make  
11 a detailed judgment on the acceptability of those sites under  
12 your rules, consistent with the EPA guidelines and rules as to  
13 their suitability for a repository.

14 In addition, during this period we will be working  
15 very closely with the affected states and Indian tribes to  
16 provide essentially the same information. And before I  
17 finish, I'd like to talk about the steps that we, the staff  
18 and the Commission are taking, along with those in the states  
19 and Indian tribes, to try to deal with making that licensing  
20 process and investigative process between now and then an  
21 effective one.

22 The current work that will begin -- and in some  
23 sense is already underway -- relates first to the completion  
24 of the development of a Site Characterization Plan, which is  
25 the major document that will detail what questions there are

1       that we believe need to be answered, and in some sense, how we  
2       plan to go about answering them.

3               The first work that begins at the site in addition  
4       to additional detailed surface investigation or investigation  
5       from the surface will be the beginning of activities that will  
6       eventually lead to sinking of the major exploratory shafts.  
7       None of this will occur perhaps in the next year; that is, the  
8       exploratory shaft work will not get going until about that  
9       time, but in the meantime we, working with the staff and  
10      working with those in the states who have an intense interest  
11      in this subject, are developing the site characterization  
12      plan.

13             Under the law you will recall that we are obligated,  
14      within 60 days of the designation by the President of these  
15      sites for characterization, to seek to enter into negotiations  
16      with the affected states and Indian tribes to reach a  
17      consultation and cooperation agreement. We have had some  
18      discussions underway with one state and with I believe a  
19      couple of the Indian tribes. Whether or not those discussions  
20      will turn out to be fruitful in the sense of them being a base  
21      for future work I think will just depend on a number of  
22      factors that we and the state will have to look at.

23             But more specifically now, we will take the  
24      initiative and invite the states, all three of the states, and  
25      the affected tribes to join us in such discussions over the



1 next several months. In the meantime, we will be developing  
2 detailed schedules, continue progress on the development of  
3 the site characterization plans, developing the approaches  
4 that will allow us to process with C&C discussions, and in  
5 particular, we'll be giving some attention to being sure that  
6 we have in place appropriate quality assurance procedures, and  
7 I'd like to address that in a little more detail as we move  
8 down the road.

9           Quality assurance procedures, of course, are  
10 important in a couple respects. They're important because the  
11 work that we're doing is an investment in a result that is yet  
12 many years down the road, and we need to be very confident  
13 that what we do is of sufficient quality and demonstrably of  
14 that quality that we and all the parties who might be involved  
15 in such proceeding down the road several years will be  
16 convinced of its quality.

17           In addition, since we are very early in that  
18 process, I think we have the unique opportunity of both  
19 shaping the process and being sure that the process that is  
20 shaped serves the purposes that we have in mind; and that  
21 we're very much earlier in this process than would be the  
22 likely case, say, for a power plant in which procedures such  
23 as the QA procedures we're talking about would be invoked in  
24 the same sense that we're talking about.

25           Let me turn quickly to the second repository

1 effort. On May 28th, when the Secretary announced the  
2 President's decision with respect to characterization of the  
3 three first repository sites, he also announced that we had  
4 reached the conclusion that based on a number of factors, that  
5 it was timely and good management judgment to defer  
6 indefinitely the site-specific activity related to a second  
7 repository. Unfortunately, some have taken that statement and  
8 the action that we have taken to mean that we have deferred  
9 all action toward a second repository, and in fact, some have  
10 even suggested that we may have abandoned the idea of a second  
11 repository.

12 On the contrary, we, the Secretary and I both,  
13 have on several occasions since then reiterated our view that  
14 the Act as it stands, which requires that a second repository  
15 be considered under a certain set of conditions and that we  
16 proceed to the definition of a site, ought to remain. What we  
17 have done, however, is in evaluating circumstances concluded  
18 that it was a bit early for us to be expending the funds that  
19 would be required on the schedule that the Act provides  
20 seeking a site for a second repository at this early stage;  
21 that in fact, there was adequate latitude and timing, given  
22 the several factors in the Act, for us to look in the  
23 mid-nineties perhaps at the then need and timeliness and  
24 appropriateness for proceeding with site-specific activities.

25 In the meantime, we will continue what we would call

1 a technology development program in crystalline rock, which  
2 was the primary activity we had underway at the time of the  
3 decision. You will recall that we had issued in January a  
4 draft area recommendation report, whose purpose was to  
5 identify I believe 12 sites in seven states, which would have  
6 been candidate sites that we would have conducted additional  
7 surface investigations leading perhaps in the early nineties  
8 to their identification as potentially acceptable sites and  
9 suitable for characterization.

10 We will continue the development of such technical  
11 data as we get from generic studies of crystalline rock,  
12 particularly in the United States, and other rock media such  
13 as perhaps clay, perhaps other kinds of crystalline rock than  
14 those we find -- granitic, primarily -- in the United States,  
15 and particularly do we expect to see the program expanded with  
16 our international partners who are involved in crystalline  
17 rock and in other rock media.

18 I am pleased to indicate to you that as recently as  
19 last week in the Radioactive Waste Management Committee of the  
20 NEA, the Nuclear Energy Agency, in Paris, of which we are a  
21 participant, we reached a tentative understanding that sets in  
22 motion some planning activities, and I believe will, before  
23 the end of the year, clearly establish a crystalline rock  
24 management group for gathering information and reviewing that  
25 information in the international environment that will be

1       useful to us as well as to our partners throughout the world.

2               COMMISSIONER BERNTHAL: Ben, excuse me, let me just  
3       ask a question if I may of curiosity about geology here. I  
4       really have two questions related to clay. Is there any  
5       evidence that we have in the U.S. clay-like material or clay  
6       material that one would judge normally is acceptable, as the  
7       Belgians apparently find their clay deposit to be, for  
8       purposes of waste disposal?

9               And secondly, in the case of clay, is it possible  
10       with that material to derive information about the hydrologic  
11       history of the deposit that you might not easily get for  
12       crystalline rock, for example? I'm not sure how you would do  
13       that, but it strikes me it's more susceptible to saturation  
14       and whatnot.

15              MR. RUSCHE: Commissioner, I think that to the best  
16       of my knowledge, we have no information that would suggest  
17       that any of the clays that have been looked in the United  
18       States would be suitable for long-term disposal. You rightly  
19       note that the Belgians have been looking at clay, and in the  
20       vein of the technology development effort, we don't want to  
21       turn away from a prospect that might have value, benefit, that  
22       we don't now understand.

23              I think it would be very difficult to have the same  
24       kind of geologic confidence, predictability, if I can say it  
25       that way, about a relatively unstable material, say, in

1 comparison with basaltic or volcanic material such as we're  
2 looking at out West, or salt or crystalline rock. But I  
3 mentioned clay only because it is being looked at in the  
4 international community.

5 I think that we want to be in a position, if in the  
6 mid-nineties we conclude, the Congress concludes, the country  
7 concludes, that in fact we need a second repository as the Act  
8 suggests that Congress might well decide, that we have  
9 available all the relevant information we can get our hands  
10 on. And that's essentially the basis for the approach at the  
11 moment.

12 COMMISSIONER BERNTHAL: You say relatively unstable,  
13 but the other question was whether -- I mean it's stable in  
14 one sense, but I guess the question about hydrologic history  
15 touches on the point that if you've got a salt bed that tells  
16 you something about recent ingress of water. Is there any  
17 comparable statements that can be made about clay as opposed  
18 to some other crystalline rock and other more stable rock  
19 forms?

20 MR. RUSCHE: I'm afraid I'm not in a position to  
21 speak to that detail in the geology. If there is such a  
22 basis, we hope to find it out. I do not now know that there  
23 is one. I think that our attention would certainly be turned  
24 more toward rocks and geologic formations which have the  
25 higher predictability.

1           You will recall that we have a continuing program -  
2   and if I can use a geologic term -- in agrelatious rock, which  
3   I think is sedimentary rock if I'm not mistaken, that we have  
4   been looking at. Some of will recall that a number of years  
5   ago we look at a triacic basin in the Southeast for an early  
6   defense program consideration in sedimentary rock. It was  
7   very tight and very dry. And such rock bodies may, at some  
8   time a long time in the future, offer prospect. We just want  
9   to be in a position in these intervening years of gathering  
10   data where we know we can use it.

11           For example, in crystalline rock we have very  
12   specific programs underway that are deep, geologic exploratory  
13   activities currently underway and which will proceed with our  
14   friends in Canada, in Sweden and in Switzerland, and these are  
15   literally in situ exploratory activities which we are  
16   currently participating in to some level of activity, and I  
17   would expect during these intervening years that we may well  
18   expand our participation.

19           I think that crystalline rock may have more  
20   transferrable properties, as soon as you can make a  
21   calibration between the two different rock bodies, than some  
22   other rock bodies might. So crystalline rock is clearly the  
23   primary focus, but by no means the only focus.

24           Let me then turn quickly in terms of the status  
25   statement, Mr. Chairman, to the MRS. We had earlier reached a

1 conclusion that an integrated waste management system offered  
2 the best prospects for meeting the nation's needs for disposal  
3 of such waste, and had concluded that a monitored retrievable  
4 storage facility, as an inseparable part of that integrated  
5 system, was desirable. Section 141 of the Act requires that  
6 we give such study to an MRS, and in fact, that we provide a  
7 proposal to the Congress.

8 About this time a year ago we indicated to the  
9 Congress that we would not be able to bring the proposal that  
10 we thought appropriate by the time required, which was July  
11 1st, 1985, but that we hoped by the end of the year that we  
12 would have such a proposal in hand. We did invite your  
13 consideration of a review draft, and we do have the  
14 Commission's comments along with those from affected states,  
15 the EPA. And we're about ready to submit that proposal to the  
16 Congress early in this year. And legal proceedings were filed  
17 in the state of Tennessee leading to an injunctive -- an  
18 injunction by the Federal District Court, which inhibited,  
19 prohibited the Department from submitting that report formally  
20 to Congress.

21 The legal proceedings have continued, and it's my  
22 understanding that the oral arguments in that suit, which is  
23 now before the Circuit Court of Appeals, the Sixth Circuit  
24 Court in Cincinnati, the oral arguments are scheduled for the  
25 24th of July, next week, and we would hope to see an early

1 resolution of the matter.

2 In the meantime, in a matter that we are only  
3 peripherally aware of at the moment, there have been  
4 additional considerations in the state of Tennessee. And  
5 you'll recall at the same time we received your comments we  
6 received comments from the Governor of the state of Tennessee  
7 and from his Safe Growth Council which was an executive body  
8 that serves the governor who evaluated health and safety  
9 issues and such related matters. And that body and the  
10 Governor came to the conclusion that health and safety issues  
11 and transportation issues were not matters of great concern to  
12 the state or the governor, but that there was a real concern  
13 about whether such facility, located as we proposed, at the  
14 old Clinch River site, might detract from potential industrial  
15 growth and economical growth of that part of the state, and  
16 therefore, on that ground, the Governor did not favor the  
17 location of such a facility.

18 There have been some considerations in an adjacent  
19 area, very nearby, in which the economic conditions are  
20 somewhat more attractive. And as I'm sure many of you have  
21 seen in the press, there have been indications that at least  
22 that area of the state, in addition to the area near Oak  
23 Ridge, likewise thinks that it would be safe and economically  
24 attractive to see an MRS located in their region. That matter  
25 is still under consideration by the state, and we have been



1 made aware of the factors and activity that's going on and we  
2 stand ready to visit the issue if and when the opportunity  
3 presents itself.

4 So we are ready to send the proposal to Congress at  
5 the first opportunity we have, and hope that will not be too  
6 long.

7 I thought I would touch -- maybe I ought to stop at  
8 that point. That's the sort of three big program areas that  
9 are involved. I wanted to touch on a number of items related  
10 to transportation, to quality assurance, to our joint efforts  
11 with the staff and with you to make more efficient the whole  
12 licensing process leading to early resolution of issues and so  
13 forth. I can either proceed with those comments now or take  
14 questions on the first three.

15 CHAIRMAN ZECH: Why don't you proceed.

16 MR. RUSCHE: We've talked two or three times about  
17 the importance of transportation and shipping. We've made a  
18 considerable amount of progress in a number of areas that I  
19 believe warrant at least a little bit of discussion and  
20 perhaps recognition on our part jointly today.

21 We have published, or had out for public comment, a  
22 Transportation Institutional Plan. It is how we planned to  
23 relate the program and involve ourselves with the multiple  
24 affected parties in the states and Indian tribes and others.  
25 And that institutional plan has been under review for several

1 months. We've had many, many comments and are in the final  
2 stages of its preparation for publication.

3 And I would hope that it would be out within the  
4 next few weeks. I have gained a reputation for making very  
5 precise predictions and not being able to keep them, so I'd  
6 like to say the next few weeks, if I may.

7 But I think that this is a step forward in that we  
8 all recognize that it is the transportation effort that will  
9 eventually be involved in the program that will bring us into  
10 contact with more people in the country than all of the other  
11 activities. And we want to be responsive and we want to be  
12 sensitive to the fact that it's important that we conduct  
13 ourselves in a manner that is responsible and is sensitive to  
14 the fact that a lot of people will be involved.

15 You may be aware that the Office of Technology  
16 Assessment just published I believe last week a study on  
17 transportation of hazardous materials in the United States; a  
18 study that's been underway for several years. I just had, in  
19 the last day or two, an opportunity to look at the Executive  
20 Summary, but I think it's a document that is well done and  
21 would serve the information needs of a lot of folks. It  
22 contains a number of evaluations, a number of suggestions and  
23 even some conclusions. And we've not had a chance to evaluate  
24 it in detail but I would note it to you if you have not had a  
25 chance to see it. Among the things that it describes as

1 shipment or movement of hazardous materials are subjects  
2 related to nuclear waste -- spent fuel and so forth.

3 If I read the document correctly in my first quick  
4 pass through it, I think the document rightly recognizes that  
5 the potential risk from the shipment of such materials is  
6 perhaps small, very small, and clearly such shipments provide  
7 greater protection to the public than almost all or any other  
8 kind of hazardous shipments that we conduct regularly in the  
9 country.

10 That's a message that you and I have talked about,  
11 other members of the Commission and I have talked about, and  
12 it's going to be a continuing area of discussion. I think  
13 this OTA report will be something that we all will see  
14 references to, and so I invite your attention to it.

15 I think we take no comfort from the fact that what  
16 we are doing in the shipment of nuclear materials is being  
17 done responsibly and done well, because I think that the scale  
18 of such shipments is small compared to what we'll have to do  
19 10 years from now, and we need to be sure that what is done in  
20 the intervening years is well done.

21 Now in addition to the Transportation Institutional  
22 Plan that I mentioned, we did sometime back in the spring  
23 publish the Transportation Business Plan, which was the plan  
24 we proposed to carry out to effect the objective of the Act,  
25 of getting the private sector involved to the maximum extent

1 possible to develop a system, an effective operating system,  
2 for shipping or transporting these materials.

3 As one of those elements, we indicated that we hoped  
4 to have a request for proposals from the private sector  
5 sometime very shortly, and indeed, we ought to be ready in the  
6 next few weeks. Which proposal will ask for the development  
7 of about 10 prototypical shipping casks which would be  
8 suitable for and for which the proposals will seek NRC  
9 certification. That means that within about a year, a year  
10 and a half, those proposals should be before the Commission  
11 for review.

12 I think it's important that we all realize that most  
13 of the shipping casks and the shipping techniques that are  
14 currently in use are sort of out of the 1960's. We haven't  
15 had a lot of new and novel design work done in the last decade  
16 with respect to shipping casks.

17 We hope that this new exercise is going to bring  
18 forth a new version, taking advantage of the current state of  
19 technology of materials and design that will give not only  
20 adequate but perhaps even added assurance of safety and  
21 environmental protection, protection against mishandling of  
22 the material as well as safety and transportation efficiency.

23 I think it's important in our discussion to  
24 recognize that I think the staff has probably not had the  
25 occasion in the last few years to approve more than one or two

1 casks. When 10 hit in the next year or year and a half, it's  
2 going to be a sizeable challenge. Those proposals are going  
3 to bring novel designs, they're going to bring new materials,  
4 and I hope that the work that we're doing right now, for  
5 example, with casks at West Valley, the work that we're doing  
6 with the Virginia Electric Power Company with respect to  
7 Surry, Carolina Power and Light Company -- all of these  
8 exercises over the last year or two and the coming year or so  
9 in the future will permit us and the staff to get to the place  
10 where such considerations can be done efficiently but most  
11 importantly, done safely.

12 COMMISSIONER BERNTHAL: Ben, if I can interrupt  
13 again, I don't suppose it's as important as whether or not we  
14 have 50 nuclear power plant designs that are different, which  
15 was, I think most would argue today, not a wise decision way  
16 back then -- why do we need 10 different cask designs?

17 MR. RUSCHE: I don't know that we need 10, but we'd  
18 like to find one good one. It's unlikely that one would serve  
19 the design of everything that we've got to handle. You'll  
20 recall BWR fuel is different size, different density, maybe  
21 even when compacted and consolidated, and likewise PWR fuel.  
22 It may be possible to combine these. For example, if we had  
23 an MRS, we might be able to combine these in a common  
24 package. But more than likely, certainly when shipped from  
25 reactors they would be in different packages, so we'd probably

1     need a cask that had that range of capability.

2             In addition, we will be shipping the defense fuel,  
3     which is vitrified material, from at least a couple sites  
4     around the country. So the idea of getting 10 designs, or  
5     about 10 -- and the number may not be 10; it may be 8 or  
6     something like that -- is more aimed at trying to get a good  
7     representation of the technique and technology that's  
8     available so that private shippers who are going to do the  
9     shipping for us can get casks that are fully certifiable and  
10    cost-effective. And perhaps we'll only need one or two  
11    designs out of that 10, but it may turn out that simple design  
12    is difficult to certify, or conversely, a simple design is --  
13    may not be easy to certify. And I think we need to go through  
14    that exercise; that's the exercise that we're attempting to  
15    start on right now.

16            COMMISSIONER BERNTHAL: I guess I was not under the  
17    impression -- and I may have been wrong -- that at least for  
18    the purpose of shipping spent fuel per se, that the adequacy  
19    of current casks and cask design was seriously in question.

20            MR. RUSCHE: They're not in question from the  
21    standpoint of safety. They may be more efficient designs;  
22    efficient in the sense that we can handle more fuel or handle  
23    it more effectively by one or more modal means.

24            COMMISSIONER BERNTHAL: I see.

25            MR. RUSCHE: There are possibilities for intermodal

1 handling. If the MRS is injected into the system, which we  
2 hope to be the case, we will need casks that would suit  
3 shipments of smaller quantities from individual sites; casks  
4 such as, for example, the West Valley cask, which is a very  
5 early attempt to look at large casks for shipping substantial  
6 numbers of elements.

7 And we're working with the staff and have been  
8 working for a number of years, and we've not yet reached a  
9 state of certification on those casks.

10 COMMISSIONER BERNTHAL: One further related  
11 question, since you mentioned it, that had been kicking around  
12 in my mind, as you know, the Commission has recently made a  
13 decision I think in the case of VEPCO's request I believe for  
14 dry cask storage. What would the impact be on the broad  
15 requirement and need for an MRS should dry cask storage onsite  
16 become a fairly widespread phenomenon?

17 MR. RUSCHE: Well, this is clearly one of the  
18 options we looked at in the needs and feasibility study for  
19 the MRS. I think our conclusion was that we need to develop  
20 dry cask technology, and I think the Commission -- I was very  
21 pleased to see the granting of certification for that storage  
22 cask for Virginia Power. In fact, from that set of exercises  
23 involving EPRI and ourselves and Virginia Power, we have  
24 already shipped I think about 65 elements to Idaho, where we  
25 have additional dry cask storage of an experimental or

1 developmental nature underway.

2 Now from Virginia, we will be shipping consolidated  
3 fuel perhaps a year and a half down the road, some of which  
4 will be stored in these casks or other casks that may come  
5 along if the situation warrants. So I think that it's  
6 important that utilities have the confidence that dry cask  
7 technology is available as an alternative to, say, fuel pool  
8 expansion and other such considerations.

9 We still believe we have a chance at meeting the  
10 1998 date, and if we do, the number of utilities that would be  
11 in what I'd say dire straits is not very large, but there may.  
12 be some. And the development of such dry cask technology is  
13 worth a lot.

14 Now, we came to the conclusion that as a policy  
15 matter or a programmatic matter, that storage at all of the  
16 plants in dry casks as a substitute for either geologic  
17 storage or MRS was not a desirable case, and we ought to move  
18 the fuel to more secure storage and we ought to move it at the  
19 earliest time we can, and that's what the Act was for.  
20 Therefore, we would think that the dry casks serve as a very  
21 interim stopgap until the material can be moved into the  
22 permanent disposal system.

23 I mentioned West Valley and note, as we've discussed  
24 on a couple of occasions, that we have a couple of very large  
25 casks that we're working on. The staff is working with us,



1 and we will continue to learn from that experience. It  
2 involves new materials and new techniques, and I think that  
3 it's perhaps a little bit of a forerunner of what next year  
4 and the year after next may be when these prototypical casks  
5 introduce themselves in the system, and probably will require  
6 a bit more ingenuity on all of our parts as we deal with that  
7 broader spectrum of things.

8 I thought maybe I would turn next to a brief comment  
9 or two about quality assurance, because I'm sure you are all  
10 aware that at least two of our sites we have issued stop work  
11 orders; that is, in Nevada and in Washington State. Many have  
12 come to me and said, this must mean the end of the program, or  
13 something to that effect.

14 I have rather taken the more optimistic view that  
15 it's an operation of the very program that we wanted that at  
16 this very early stage, although we do not have specifications  
17 to look at, we don't have construction to look at -- for  
18 example, we're not pouring concrete -- and the question is how  
19 much rebar did we have in the concrete and the QA documents  
20 don't really show it, what we're doing is beginning to  
21 formulate programs to develop information, scientific  
22 information and engineering information, and we want to be  
23 sure that the documentation that attends that effort and its  
24 ability to demonstrate that we had demonstrable procedures in  
25 place that provide high confidence in the quality of the data

1 and the reproduceability of the data are operative.

2 What we've done is we've begun to look now, as we  
3 move beyond the early stage of beginning to look at  
4 environmental assessments, and we're beginning to think about  
5 this more active investigational program and we found that we  
6 didn't have some of those in place. And you can do one of two  
7 things; you can kind of struggle along and hope you can  
8 develop them as you go, or you can do what was done -- in this  
9 case, a stop. Say let's done do those things until we get  
10 developed the adequate procedures and adequate confidence that  
11 we're proceeding.

12 Now I know your staff have been involved in some of  
13 these, and some of their reactions have been fairly sharp.  
14 And we're not averse to sharp reactions. The reaction of our  
15 headquarters staff was pretty sharp in some cases.

16 On the other hand, we're at a time when we can make  
17 the corrections, take the corrective action, and hopefully we  
18 all will be more confident about what we're doing down in the  
19 future.

20 I would note that we're all learning in the process,  
21 and it is difficult if someone has been looking at poured  
22 concrete or pipe sizes or weld quality and so forth, to know  
23 just how to design and carry out a program designed to produce  
24 quality.

25 We believe that we have made some progress and

1 certainly appreciate working with the staff, your staff, and  
2 gaining some understanding, taking advantage of experience  
3 that's been gained in power plants, but also trying to be sure  
4 that we apply it correctly and appropriately and that it's not  
5 directly transferrable. And we're learning from those  
6 lessons.

7 I think we're learning that we need to have full  
8 assurance from my office, my personal office, of our  
9 headquarters' involvement in such things. Most everybody  
10 that's looked at the program, whether it be the Commission  
11 staff or the utilities who have looked at it or the states,  
12 have made comments to the effect that we need to have more  
13 headquarters involvement, and we are taking steps to enhance  
14 our participation and assure that we have involved at an  
15 adequate pace and level of detail.

16 Gene Langston serves as my personal quality  
17 assurance representative and overseer for the entire program.  
18 Gene has had a good bit of experience with Commission activity  
19 and I think is highly regarded in the field, but one man  
20 doesn't make the job. Gene is effective; projects are going  
21 to have to be effective and contractors are going to have to  
22 be effective.

23 So I think that we are making progress. In  
24 addition, if I may be so personal, we've added another  
25 Commission alumnus to the activity in the person of Jim

1 Knight. I marveled at folks that worked with me a couple of  
2 years -- I guess now 10 years ago -- when I had the  
3 opportunity of working with the Commission, are still willing  
4 to work. But I'm pleased to see that they are, and not only  
5 work but work with me, or worked with us. And I'm pleased  
6 that Jim has joined us, and he serves as the Director of  
7 Quality Assurance and Licensing-Related Activities for the  
8 Geologic Repository Program.

9 So I hope that as we go down this path together, we  
10 will continue to see a growing evidence and strength in the  
11 quality assurance program. . But I have no allusion and we have  
12 no allusion that the program was born with that set of  
13 attributes, nor have we arrived yet. We are continuing to  
14 develop, and we will continue to count on interaction with the  
15 staff, and we'll do our very best to see that all of our  
16 purposes are satisfied by that approach.

17 CHAIRMAN ZECH: Well, as far as I'm concerned, this  
18 is what the staff has been communicating with you, too, up  
19 until now, and I appreciate your viewpoint, because this is  
20 the same thing I've understood the staff's concerns. I think  
21 that we've set a milestone, at least for NRC, of having our  
22 comments review done by the end of this year, and it is, as  
23 you say, there are a lot of things to do together. But it  
24 does require,-- if we're going to really give you the kind of  
25 product that we want to give you and we're going to give you,

1       it requires a fair amount of understanding and close work  
2       between DOE and NRC, and I know that's going on.

3               But I just would like to emphasize that we consider  
4       -- we're concerned about exercising our responsibilities very  
5       carefully, as you are, so I can't emphasize too strongly the  
6       necessity for very close cooperation and understanding. In  
7       some cases here, quality assurance is so very important in  
8       this issue; we're plowing a little bit of new ground and there  
9       are things to do that we're still working on. So we need the  
10      time, is what I'm saying, in order to give the product that we  
11      have confidence in. And I'm sure you feel the same way.

12             But I would just like to emphasize that from my  
13      personal standpoint it does look like that's going to be a  
14      rather significant task to be completed on time. We want to  
15      do it right, and we would solicit your continued understanding  
16      of our part in this to comment on it in a responsible manner.

17             MR. RUSCHE: Sure. Mr. Chairman, I think that at  
18      this stage of the game, we're at a crucial point in assurance  
19      that we set our course in the right direction. And we will  
20      certainly be responsive. We will try to be cooperative at  
21      every step of the way.

22             I do recognize as -- I don't spend 50 percent of my  
23      time on the subject, but I'm spending a sizeable portion of  
24      my time. And John Davis and I have had a number of  
25      conversations as John and others who have been involved

1 from his staff have visited many of these issues, and the two  
2 of us together plan to not only be visible literally, but to  
3 be participators in the development of the positions and  
4 approaches that we're going to take. We've just to got to get  
5 those kind of things put in place early in the program --

6 CHAIRMAN ZECH: I guess my only point really is that  
7 -- I agree that we want to do that. My only point is that the  
8 December '86 milestone is important, we certainly want to meet  
9 it if we can, but if we don't meet it, it's because we're not  
10 ready and we're not going to give you the product until we are  
11 ready.

12 So there's a lot to do and I just would like to  
13 mention that here, in July of this year, so that we can all  
14 have time enough to do what we can. We're not going to give  
15 you the product in December of '86 unless we are confident  
16 that it is good, and I just say that there's a lot to do  
17 between now and then.

18 MR. RUSCHE: I fully agree. I suspect that we'll be  
19 looking at that schedule as well as others as we go from  
20 conversation into real work that we're getting underway now.  
21 I appreciate your comment very much.

22 There are a couple sets of activities that I would  
23 mention sort of in conclusion in my general comments that I  
24 think go toward use of this next five or six years in the most  
25 effective way, leading to the time when we make a

1 . recommendation to the president for selection of a site and  
2 soon thereafter, file documents with the Commission requesting  
3 construction authorization for a repository.

4           One has to do with how we handle the Environmental  
5 Impact Statement. You'll recall that under Section 114(F) of  
6 the Act, we are directed to prepare an Environmental Impact  
7 Statement. There are suggestions in the law that we ought to  
8 work together and that the Commission, to some extent, and  
9 perhaps the extent practical, ought to use the document that  
10 we prepare.

11           Our staffs have been looking at what this means.  
12 We've had some discussions with CEQ, and I believe your staff  
13 will be bringing proposals to you in the next two or three  
14 months as to how we might put in place an appropriate  
15 procedure for our interaction that preserves your ability to  
16 fully review and carry out your statutory function, as well as  
17 us to do the same thing and both of us do it with some measure  
18 of efficiency. I don't think we know the final answer as to  
19 how the best way to do that.

20           But it's interesting that here we are five years  
21 from a decision and we are beginning to develop elements of an  
22 Environmental Impact Statement long before we have the data to  
23 put in it. But that is part of the process that will help us  
24 to identify what data we need, indeed, as we are working  
25 toward that end over the several years.

1           So I think that we've had -- jointly had a meeting  
2 with the CEQ, and I think it's interesting to note that we as  
3 two federal agencies, with CEQ, find it tolerable to have some  
4 joint discussion without compromising our respective roles in  
5 the matter. And I think that we'll find that continue to be  
6 the case.

7           In the same vein of trying to utilize our resources  
8 effectively, we have together had a good bit of discussion  
9 about the licensing support system; that is, that large system  
10 that will be that reservoir of information and data collected,  
11 which hopefully will make efficient the eventual licensing  
12 process. We are continuing to work with the staff. We are  
13 moving ahead in some procurement areas. We've had our  
14 contractors and our staff in touch with your staff in work  
15 that you've been doing.

16           And I continue to be impressed that the prospect is  
17 real; that we're not just whistling in the dark. There is a  
18 basis for not only hope, but real expectation that we can get  
19 such a system in place in time for us to contribute to our  
20 licensing efficiency.

21           I can't help but think back, again about ten years  
22 ago, when I was looking at some of the things that you're  
23 looking at -- or I guess you really aren't looking at very  
24 many now, but I was looking at new applications ten years  
25 ago and getting ready for hearings and so forth -- at how



1     burdensome was the task of dealing with the litigational  
2     procedure that we're obligated and, in fact, I think produces  
3     a sound result. But we need something, we needed something  
4     then, and maybe what we're doing will have applicability  
5     beyond what we're doing just for the waste program.

6             Whether it does or not, I think it's essential that  
7     we have it for the waste program, and we're going to continue  
8     and appreciate very much what your staff is doing to work with  
9     us and with the states, and I understand that you are looking  
10    forward to some activity to put that system in a form that  
11    will really make it workable. And I commend it to you for  
12    your attention, and if there's ever a chance that we need to  
13    reason together on about making it work, I stand ready at a  
14    moment's notice to visit the issue, because I think it's very  
15    important. .

16            In that same vein, we and the staff have mentioned,  
17    and I think we've mentioned in a couple of our discussions,  
18    looking for some vehicle to address the early resolution of  
19    issues if and when they arise, during this investigational  
20    period. We surely don't have a final result -- and I know  
21    you'll want to visit with the staff -- but one approach that  
22    at least has a measure of prospect is what you would call  
23    today topical reports -- whether that's the right set of words  
24    -- but it's some mechanism for taking an issue which can be  
25    circumscribed by some particular environment, can be addressed

1       technically, and we can identify differences between the staff  
2       and our staff, and we can attempt to resolve those, and where  
3       we can, we can make that resolution effective.

4               Now, that does not serve as a final legal resolution  
5       of the issue, and I presume that at some time we and you would  
6       want to look at whether we go to that point of legal  
7       resolution through perhaps as much as a hearing on a number of  
8       these things, for example.

9               Whatever the case may be, I invite your attention  
10      over the next six months or a year or two, as we're all  
11      looking at the matter, to look for ways that we can put in  
12      place in these early days approaches of that sort, whether  
13      it's this one or some other one that will again help us all,  
14      when we're in that literal licensing review period, in the  
15      early 1990s..

16              I'm very grateful for what I hear and see that your  
17      staff has been doing and our staff has been doing together.  
18      And I hope that our work with the states and your work with  
19      the states and indian tribes will equip them and acquaint them  
20      with what we're doing and they, too, will feel comfortable in  
21      working together in that regard. I don't think we've arrived  
22      at that stage quite yet, but I think it's important that we  
23      strive for it.

24              With that, Mr. Chairman, I think I'd stop and see  
25      what questions that I've raised that you'd like to speak

1 further to, or others that you have.

2 CHAIRMAN ZECH: Thank you. Questions from fellow  
3 commissioners?

4 COMMISSIONER ASSELSTINE: Just a couple.

5 Ben, we're planning our budget now for fiscal years  
6 '88 and '89. Should we have anything in our budget, in terms  
7 of waste activities for a second repository in that time  
8 frame?

9 MR. RUSCHE: I would think you would want to have  
10 the availability of your geologic repository staff to  
11 participate in technical reviews that we might be doing, for  
12 example on a crystalline rock topic of some sort. But nothing  
13 nearly as formal as would have been the case if we were doing  
14 onsite investigations, for example.

15 COMMISSIONER ASSELSTINE: Okay, so if we're  
16 extending out that period of time, through the end of '89,  
17 nothing related to areas -- examination of areas or anything  
18 like that all?

19 MR. RUSCHE: Based on our present decision, unless  
20 Congress were to make some decision to the contrary.

21 COMMISSIONER ASSELSTINE: Just a small effort to  
22 look at the generic kind of question about crystalline rock  
23 kind of work?

24 MR. RUSCHE: Yes, or other rocks that might come in.

25 COMMISSIONER ASSELSTINE: Quality assurance. You

1 mentioned some of the areas of concern or problems, both to  
2 our staff and to yours, and some of the efforts you've made to  
3 try and deal with those, including the stop work orders. Do  
4 you have an estimate for when you think you'd have a fully  
5 qualified QA program in place for the first repository  
6 activities? And particularly do you think it will occur  
7 before you get heavily involved in the site characterization  
8 work?

9 MR. RUSCHE: I think the answer to the first  
10 question is I don't really know. I think some of the reviews  
11 that we are doing will help us define what a fully qualified  
12 program is. We know what the objectives, but how you do that  
13 in this stage of evolution, I think, is not fully clear yet.

14 I do hope that we will have a program that we would  
15 all view as a fully qualified or an acceptable program before  
16 we get too deeply involved in things. I don't think we'd want  
17 to be in the position of going back and digging another hole,  
18 if you would excuse the pun.

19 COMMISSIONER ASSELSTINE: Right.

20 Transportation. You mentioned the cask design work  
21 and also the transportation business planning. At the  
22 previous meeting, we talked about DOE's commitment to follow  
23 both the NRC and DOT regs. Does that apply not only to the  
24 commercial waste, the spent fuel, but also to the defense  
25 wastes? For example, will those casks be certified, will

1 transportation and shipment be done in compliance both with  
2 our regs and DOT regs?

3 MR. RUSCHE: The short answer is yes. When we last  
4 talked we were uncertain as to whether or not the shipment of  
5 the defense waste would be under our purview, or whether we  
6 would receive them -- for example -- at a site. We are  
7 virtually at agreement, although I would not like to be  
8 premature. I think that there is not much doubt that defense  
9 wastes will be shipped under RW, under the civilian program,  
10 meaning they will be shipped in NRC certified casks and  
11 consistent with DOT rules.

12 COMMISSIONER ASSELSTINE: I guess the last question  
13 I have is there anything in particular that you need from us,  
14 that's outstanding, or that we owe you, or that we should be  
15 doing -- apart from the obvious things about working on the  
16 site characterization plans? Is there anything else that we  
17 should be doing over the next six months or so?

18 MR. RUSCHE: Commissioner, I don't have a menu or a  
19 list of items that I can identify. The thing that stands out  
20 most in my mind, as we look at what we're doing, what you're  
21 doing together, is the -- if I can call it the novelty in the  
22 sense that we're doing a lot of things to which we all want to  
23 apply Commission procedures, which procedures have never been  
24 applied this early in the process. And we want to take  
25 advantage of the option to use such procedures and produce the

1 value they can produce.

2 I think it's going to continue to be an item of  
3 importance for the Director of NMSS, for I, for you to be sure  
4 that we're using those resources effectively, and my staff as  
5 well. Some things that we would want to do eventually are  
6 just premature to do now. And again, I'm not speaking from a  
7 subliminal list of things that are being done badly. It's  
8 just a continual necessity on both of the staff's parts to be  
9 sure that we are using both time and effort as effectively as  
10 we can, and getting something for its use.

11 It's not just enough to use it, but we ought to get  
12 something valuable for it. Sometimes you can't get what you'd  
13 like to get today. And that recognition is a little bit  
14 foreign to the environment in which you're considering an  
15 application or a construction project, per se. So I think  
16 we're all learning, and my impression is that we're doing it  
17 reasonably well. And we certainly want to continue that.

18 COMMISSIONER ASSELSTINE: Thank you. That's all I  
19 have.

20 CHAIRMAN ZECH: Fred?

21 COMMISSIONER BERNTHAL: One or two things, not  
22 necessarily related to what you already told us, Ben. I'm  
23 curious about the agreement that -- or maybe it's a draft  
24 agreement at this point, that your folks at OMB and DOE's  
25 defense people apparently have worked on -- I don't know

1     whether it's concluded or not -- on determining what the  
2     contribution to the waste fund for defense wastes will be.

3             There's a rumored number in the neighborhood of \$3  
4     or \$4 billion or something like that, I guess. What's the  
5     status of that and has any determination been made on exactly  
6     how the appropriate level of that contribution will be  
7     calculated?

8             MR. RUSCHE: If you can feel the burr under my  
9     saddle kind of gnawing, this is a subject that we've talked  
10    about a number of times and, even in my imprecision, I've  
11    suggested in earlier times that in a few weeks we would have  
12    that resolved. It is not yet fully resolved, I'm sad to say.  
13    It's still under discussion.

14            But I think there are a couple of comments I can  
15    make that I believe bear on the subject. We thought about  
16    trying to find some way that we could formularize -- develop a  
17    formula -- or a set of options for estimating what the cost  
18    might be. And we have indeed developed some. The industry  
19    has developed some and you've probably seen those published.  
20    Maybe others have, too, that I'm not aware of.

21            And there are several approaches you can take and  
22    the numbers have run from, as I recall, maybe \$1.5 billion to  
23    maybe \$10 billion in constant dollars out of say a \$30 billion  
24    total program.

25            I don't know that there is a right answer. After we

1 have gone through the exercise with respect to rulemaking and  
2 how we handle this from a public standpoint, we feel obligated  
3 to make the public fully aware of how we approach the subject  
4 and do intend to issue, in the Federal Register, what I think  
5 we will call a -- it's something like a national policy  
6 statement or -- a policy ruling, excuse me. The terminology  
7 is carefully crafted to represent the product.

8 We came to an interesting conclusion that I think we  
9 have had in an entirely different environment. We started to  
10 think about how you set that fee and then how you get it  
11 paid. Congress sent a mill per kilowatt hour and we thought  
12 about setting \$2 billion and the equivalent annual payment or  
13 \$5 billion or whatever it turns out. And then we realized  
14 that the payer was the Congress. And we didn't think that a  
15 rulemaking proceeding was likely to carry the effect of a  
16 completed action in that regard.

17 So what we will do, in the document, is present  
18 three or four approaches for estimating the fraction or  
19 estimating the contribution and indicate that this is what we  
20 will base our budgetary requests on. What Congress does with  
21 that is by no means clear at the moment. I think the  
22 utilities, if there are any present, probably shudder at the  
23 very thought that we can't unilaterally impose upon the  
24 defense program \$20 billion or \$2 billion or whatever it is.

25 But we've recognized -- it took us a long time but



1 we recognized that we don't have the wherewithall to cause  
2 Congress to do exactly what we would like. And that's where  
3 the matter lies.

4 The document that we will issue in the Federal  
5 Register will identify three or four methods and the one that  
6 we think is the best one, which will establish a base for our  
7 proposal to Congress in the annual budget.

8 COMMISSIONER BERNTHAL: I think I've just been told  
9 this issue isn't settle yet.

10 [Laughter.]

11 Somewhat related to that is the question tied up in  
12 your deferral of the site specific consideration, at least for  
13 the second repository, the eastern repository site. What is  
14 your best estimate now, based on I guess the current waste in  
15 the field, so to speak, on the NRC's pretty good projections I  
16 think on the number of plants that we're likely to license for  
17 the next 15 years or so and the time table for that licensing,  
18 the waste that they will generate?

19 The missing element may very well be the exact  
20 volume of waste that will arise from the DOE defense programs.

21 But rolling all that together, now, what is your  
22 current projection for the point at which the 70,000 metric  
23 ton would be exceeded and then it would be necessary to have  
24 the second repository in place?

25 MR. RUSCHE: It turns out that the major

1 consideration, with respect to the point in time, derives less  
2 from the amount of materials to be eventually generated than  
3 it does from the rate at which we emplace the material. If  
4 there is at least 70,000 tons to be evolved and surely, based  
5 on the information we have -- including defense waste  
6 equivalent -- there is going to be more than 70,000 tons.

7 We had originally estimated maybe 140,000 tons. I  
8 think all the more recent projections indicate that that's  
9 probably a considerable overestimate. But if there is more  
10 than 70,000 tons, then the question is when. And the when is  
11 primarily determined by how fast you emplace it.

12 The design basis for the repository is the ability  
13 to emplace about 3,000 tons per year. So that means you have  
14 about 20 or 25 years between the time you start loading the  
15 repository and the 70,000 ton fill. Now if it turns out that  
16 one of the values of the second repository which came on line  
17 during that same period would be to enhance the rate of fill.

18 The rate of generation at the end of the century, we  
19 envision as somewhere in the neighborhood of 2,000 tons per  
20 year to 2,500 tons or thereabouts, arising from civilian  
21 sources. Of course, there's going to be some 35,000 or 40,000  
22 tons in existence when we start, so in order to work that  
23 backlog off, you have to exceed the generation rate or  
24 continue for a long time.

25 I don't think we have yet reached the decision as to

1 whether the rate question alone would warrant a second  
2 repository. But I think the question is based on current  
3 designs, we have testified and will repeat again -- and those  
4 designs are available -- that we think about 2020 is the time  
5 you would need a second repository, under the design basis and  
6 the 70,000 ton limitation. Therefore, if we start in the  
7 middle '90s, we would have adequate time to conduct the site  
8 specific investigations and go through the design and  
9 construction of a second repository.

10 And that's an essential element in the Secretary's  
11 determination to defer for about that many years, the site  
12 specific work.

13 COMMISSIONER BERNTHAL: There's no significant  
14 uncertainty, though, contributed by the question of defense  
15 waste, when you arrived at that 2020 target date? I guess the  
16 reason I'm asking the question related somewhat to the first  
17 question I asked, if you really have a good picture of the  
18 volume of defense wastes and the contribution to the program,  
19 one can imagine that the formula then ought to be worked out  
20 for the cost? There might be solutions that will suggest  
21 themselves more easily.

22 MR. RUSCHE: And they do come out pretty  
23 straightforward. But, for example, if you have -- let's take  
24 as a good example -- 10 or 12,000 tons equivalent defense  
25 waste in a system that has maybe 120,000 tons of civilian

1 waste. 120,000 is kind of the upper middle projection. It  
2 might be as low as 100,000.

3 But you get a fairly different fraction if you use  
4 120 or you use 70.

5 And you can't tell for sure which it is going to  
6 be, so what we do when we estimate the adequacy of the waste  
7 fund, which is a comparable exercise each year, we make  
8 estimates using the provisions of the Act and such  
9 projections, and generally use the case that is representative  
10 of what would be the most financially demanding case to  
11 evaluate the adequacy of the 1 mill per kilowatt hour fee. If  
12 you use that case and then use the defense arisings, you are  
13 ending up getting a smaller fraction than you might if  
14 that rate of civilian generation was lower than we had  
15 projected.

16 Those are the kinds of questions you will have to  
17 visit and I think Congress will have to visit when we look at  
18 the fractional fee contribution.

19 COMMISSIONER BERNTHAL: But the volume of defense  
20 waste generated is not an uncertainty? That, I guess, is  
21 where you --

22 MR. RUSCHE: Well, yes it is uncertain to some  
23 extent, but the total quantity that may be generated is a  
24 relatively small fraction of the total, so the uncertainty  
25 does not produce equivalent absolute uncertainty.

1           COMMISSIONER BERNTHAL: Okay. A last quick one  
2 here. As you have pointed out, there seemed to be some other  
3 rumblings, so to speak, down in the State of Tennessee on  
4 possible siting of the MRS. I happen still to be a subscriber  
5 to the Oak Ridge area, and therefore I read these things  
6 fairly frequently, and the suggestion of Morgan County has  
7 been very much in the news lately.

8           I am also reminded, though, that the oral arguments,  
9 I think, are scheduled to begin next week for the Tennessee  
10 challenge to the Oak Ridge CRBR site. I don't know whether  
11 that has any particular significance, but what is going on?  
12 Is this a chicken and egg circumstance? Obviously, DOE is in  
13 a particular position because of the fact that you represent  
14 the Federal Government. Is there any hope that that issue is  
15 going to be resolved down there, in your judgment, or is it  
16 chicken and egg --

17          MR. RUSCHE: Do you mean outside the Court?

18          COMMISSIONER BERNTHAL: Well, yes, I guess that  
19 would be the question. Is it just a case where one party is  
20 waiting for the other party to do something, or what is  
21 happening? Maybe you can't speak to that.

22          MR. RUSCHE: Well, we have an obligation under  
23 Section 141 to present a proposal to Congress. We have a  
24 proposal ready to go to Congress, and we have been enjoined  
25 from presenting it. In that sense I think we have got to

1 pursue the matter to the point where we are either permitted  
2 to send it or we are given a prescription for what it would  
3 take, and we don't have either of those now.

4 The introduction of the other considerations that  
5 you referred to would probably give us a basis if the  
6 information were in the right form, and it may well be it  
7 would give us a basis for modifying that proposal if we could  
8 send it up.

9 I think you have these two actions that are going  
10 along. One does not necessarily substitute for the other, and  
11 we have just got to see it played out, I think.

12 COMMISSIONER BERNTHAL: But I guess what I am  
13 getting at is most of what I have read appears to be limited  
14 to statements made by leaders at the county level, and I  
15 gather there has as yet been no similar statement by anyone at  
16 the state level down there.

17 MR. RUSCHE: We have had no such communication. I  
18 have received a letter from the County, as you indicated,  
19 indicating what their current view is. We have received no  
20 communication from the State related to it.

21 COMMISSIONER BERNTHAL: Thank you.

22 CHAIRMAN ZECH: Just a question on the licensing  
23 support system. Could you comment just a little bit more on  
24 your opinion about the time schedule so that system might be  
25 in place to facilitate the licensing process? Is it

1 proceeding? I know NRC is involved in it also. We are  
2 working together with you on that. Could you tell us just a  
3 little more about that? I know you have talked and our people  
4 have talked, too, to the States and the Indian tribes, but I  
5 think it's an important program that could lend a great  
6 facility to the process. Could you comment just briefly on  
7 that? How is that moving along?

8 MR. RUSCHE: I think the effort itself is moving  
9 along sharply, and as I indicated, we hope to have a request  
10 for proposal ready, I think, by about the end of the year.  
11 Procurement of such a system, that is, issuance of an RFP and  
12 then getting others to work, getting contractors to work on  
13 it, I think suggests that the system is not likely to be fully  
14 operable for at least a couple or maybe three years, and one  
15 of the elements that we are looking at is trying to be sure  
16 that as early as we can, we get enough of the dimensions of  
17 the system established so that the information is being  
18 accumulated in a fashion so that it can be entered into and  
19 subsequently be operated upon by the system when it finally  
20 becomes available.

21 CHAIRMAN ZECH: Is it going to have any significant  
22 use between now and two or three years? Is it all a  
23 developmental process?

24 MR. RUSCHE: No, I think it will have use in the  
25 sense that very shortly we will have guidelines about the form

1 and the manner in which data are presented and preserved for  
2 subsequent use in the system. In that sense it will be of  
3 great value to us. If we can all agree on how you do that,  
4 that in itself would be a major step forward. Then there  
5 comes the necessity to develop the software and the hardware  
6 that would take the information in that form and make it  
7 readily available to all the parties and the States as well as  
8 ourselves and your staff.

9 CHAIRMAN ZECH: The process of involving the States  
10 and Indian tribes is a continuing one and one that I know you  
11 and your people and our staff are working on, too. I would  
12 just like to emphasize the importance of that program. We  
13 can't emphasize it too much, as far as I am concerned. It is  
14 awfully important that we do that.

15 Maybe you would like to comment very briefly on your  
16 program of informing the public, the States affected,  
17 especially in the Indian tribes. I know it's an ongoing  
18 effort, but I think it is so important it probably should be  
19 worthy of your view on that very briefly.

20 MR. RUSCHE: Mr. Chairman, we certainly recognize  
21 the importance and the obligation we have under the Act to do  
22 just that. I think we continue to find that our best efforts  
23 are not adequate, and we continue to work to improve and work  
24 with the States. I think we also find the circumstance that  
25 it is very difficult for parties to work together if the



1 objective that you are working toward is a very different  
2 objective.

3 I think with the decision by the President, we may  
4 begin to see a little bit more recognition. Whether it is  
5 acceptance or not, I could not say, but I think at least  
6 recognition that we are going to characterize three sites and  
7 that it is to everybody's advantage, the States, the Indian  
8 tribes, and the Commission's advantage, that we do that job  
9 well so that we have a valid basis for making a judgment about  
10 the acceptability of a site when the time comes in the early  
11 nineties to recommend that site to the President. With that  
12 recognition, I think we are beginning to see that perhaps some  
13 of our efforts will have paid off, and not ours alone.

14 We see members of the States who are working to that  
15 same objective. We still have a long way to go before the  
16 matter can be dealt with in a non-contentious environment, but  
17 I do believe that the efforts of the next year or so, as we  
18 move from discussion into beginning to really implement the  
19 program through the SCP and the work on characterization  
20 begins in fact, that the States will exercise themselves to  
21 see that the work we are doing is being done well.

22 I think they will develop efforts, some of which may  
23 take the form of the effort that is in New Mexico where the  
24 work with the Department's WHIP facility, I think, has  
25 provided at least one technical model that has some benefit.

1 Most of the states are now working vigorously to develop their  
2 own technical capabilities. We will be providing increased  
3 funding.

4 So I share your view that working with the States is  
5 an important element of the program, not only important but  
6 absolutely essential, and we are going to continue to try to  
7 do better than we have done but I predict we are still going  
8 to have some work to do over the next year or two.

9 CHAIRMAN ZECH: I am sure you are right. You have a  
10 most difficult and demanding task. I know you are carrying  
11 out the will of Congress to the best of your ability. We are  
12 doing the same thing in the NRC. We both have grave  
13 responsibilities to the American public, and I know you and  
14 DOE, as well as we in NRC intend to carry them out fully and  
15 with all the technical competence and good judgment that we  
16 have.

17 I would like to thank you, Mr. Rusche, for your  
18 presentation here today. I think it was very informative,  
19 very important, very timely. I think it is very useful to  
20 have these regular briefings to keep the Commission informed  
21 on the developments and the potential issues, their impact on  
22 the National Waste Policy Act.

23 I think it is important also that we recognize that  
24 part of our task is to reduce the potential for  
25 misunderstanding, conflicts, try to reduce uncertainty as best

1 we can, try to reduce delays in the program. On the other  
2 hand, I submit it is so important that we must do it right,  
3 and if it is going to take delays, it is going to take delays,  
4 as far as I am concerned. That doesn't mean we are not going  
5 to try to meet the schedule, but we are about something that  
6 is very unique and we are all going to give it our very best  
7 effort to meet the schedule, but more importantly, to do it  
8 right.

9 I think it is necessary that we keep this an open  
10 and frank dialogue. I think your work with the Staff, I  
11 understand from Mr. Stello and Mr. Davis, that the work is  
12 proceeding on a professional level that I am informed is one  
13 that is making progress and is a dialogue that is respectful  
14 and professional but also very serious and businesslike. So I  
15 am aware of that.

16 I think this is a program that is awfully important  
17 to our nation, and I certainly commend you for the gigantic  
18 task you have before you. But again, it is so important to  
19 our country and to the NRC as well as to your department that  
20 we simply must do our very best to assure ourselves that we  
21 are doing exactly what is right because it's a far-reaching  
22 program that has lasting implications and we simply must do  
23 our best. I think that is what we are all trying to do.

24 If there are no further questions or comments, that  
25 adjourns the meeting for today.

[Whereupon, at 3:15 p.m. the meeting was concluded.]

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2 REPORTER'S CERTIFICATE  
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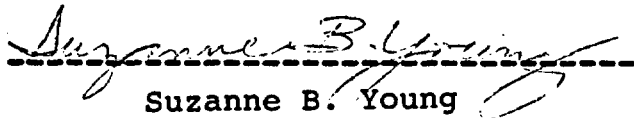
4 This is to certify that the attached events of a  
5 meeting of the U.S. Nuclear Regulatory Commission entitled:  
6

7 TITLE OF MEETING: Briefing by DOE on Status of High Level Waste  
Program (Public Meeting)

8 PLACE OF MEETING: Washington, D.C.

9 DATE OF MEETING: Tuesday, July 15, 1986  
10

11 were held as herein appears, and that this is the original  
12 transcript thereof for the file of the Commission taken  
13 stenographically by me, thereafter reduced to typewriting by  
14 me or under the direction of the court reporting company, and  
15 that the transcript is a true and accurate record of the  
16 foregoing events.

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19 Suzanne B. Young  
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22 Ann Riley & Associates, Ltd.  
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24  
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