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NUCLEAR REGULATORY COMMISSION

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**IN THE MATTER OF:**

PUBLIC MEETING

GENERAL BRIEFING ON WASTE MANAGEMENT

**Place -** Washington, D. C.

**Date -** Thursday, 8 December 1977

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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6 PUBLIC MEETING

7 GENERAL BRIEFING ON WASTE MANAGEMENT

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10 Room 1130  
11 1717 H Street, N. W.  
Washington, D. C.

12 Thursday, 8 December 1977

13 The meeting was convened at 9:00 a.m., pursuant to  
14 notice, Dr. Joseph M. Hendrie, Chairman of the Commission,  
15 presiding.

16 BEFORE:

17 JOSEPH M. HENDRIE, Chairman  
18 PETER A. BRADFORD, Commissioner  
VICTOR GILINSKY, Commissioner  
RICHARD T. KENNEDY, Commissioner

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cmwlP R O C E E D I N G S

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CHAIRMAN HENDRIE: Let's convene this meeting and  
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get on with it.

4  
I am glad to see you all this morning on a subject  
5  
of considerable interest.

6  
I might say in a very general introductory statement  
7  
that it seems to me from my brief tenure here that the  
8  
Commission has initiatives under way in a number of important  
9  
areas.

10  
Waste management is certainly one of these.

11  
It also has seemed to me that to at least some  
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extent the individual efforts, preparation typically of a  
13  
Commission paper, proposal for action and so on, that these  
14  
individual initiatives tend to rise to the Commission in a  
15  
somewhat random fashion, depending upon the pace at which they  
16  
are prepared in the Staff, and how well the concurrences  
17  
go and how difficult and complex the subject is and obviously  
18  
all sorts of other things.

19  
The effect, however, is to leave the Commission  
20  
considering as it sits down to discuss with the Staff one of  
21  
these papers, one item in what may be a broad subject,  
22  
and I find at least for myself sometimes a little difficulty  
23  
in placing the individual subject of discussion in the  
24  
context of what may be the much broader set of policy initiatives  
25  
that the Commission has.

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I have therefore asked the Staff to prepare for  
the Commission briefs of the type we will have this morning  
on waste management which attempt to go across the whole scope  
of that field, to point out the problems, the places where  
we need to do things, and to try to put a -- identify some  
of the efforts that are under way within the Staff to fill  
whatever may be gaps in our coverage in these areas.

So I hope that the Commission will be seeing a  
series of these things; there are probably a dozen major  
areas we ought to cover in this fashion.

Then, subsequently, as we come to grapple here  
with one or another of the individual papers connected in  
a broad field, hopefully the Commission will feel that it has  
had some recent background presentation and identification  
previously of where that piece of work or proposal fits in  
the overall scheme, and, hence, the context in which to judge it.

So this is the first of these broad coverage  
briefings.

The intent here then is not to go down into the  
detail in any area, but rather to try to present the whole  
field.

One of the important aspects of this sort of  
briefing, in addition to providing a context for individual  
papers, is to give us a chance to stand back and see if by  
chance we have left some holes in our approach to the area and

cmw3

1 do not have under way efforts that we ought to have under way  
2 to provide appropriate policy guidance criteria, regulations,  
3 or whatever may be appropriate.

4 COMMISSIONER GILINSKY: Sounds like a good idea.

5 CHAIRMAN HENDRIE: Well, it seemed reasonable  
6 at the time.

7 Okay. So we are glad to see you.

8 It's good to see the leaders of the first of  
9 these general briefings.

10 MR. SMITH: Mr. Chairman, Thank you. Last time  
11 we had an opportunity to brief the Commission on waste  
12 management I believe was last January.

13 I just have a few remarks.

14 At that time we discussed the waste management  
15 program primarily with emphasis only on the Office of Nuclear  
16 Material Safety and Safeguards.

17 We have requested an expansion of our resources  
18 in terms of people and dollars, last January, and we also  
19 sought your permission to make some changes in our organi-  
20 zational structure to better address the problem.

21 You were agreeable, and since then a lot has happened.

22 As you know, the President's decision in April with..  
23 respect to reprocessing, and therefore ultimately how we are  
24 going to handle the high-level waste problem, the formation or  
25 creation of the Department of Energy, some of the difficulties

cmw4

1 that that has presented, and, not least, there has been a  
2 tremendous surge in interest by the public.

3 By the public, I mean not only environmental groups,  
4 general citizens, but also the utilities to solve this high-  
5 level waste problem.

6 So this briefing today is, as you said, Mr. Chairman,  
7 to summarize in a very broad way where NRC is with respect  
8 to waste management, where we are now, where we are going,  
9 and what are some of the broad problem areas that we see before  
10 us.

11 Mr. Myers is going to give the briefing with  
12 assistance from Dr. Bishop, who, of course, has the lead role  
13 within the Office of Waste Management Program.

14 MR. MYERS: Can I have the first slide, please?

15 (Slide.)

16 The major goals of the Waste Management Program are  
17 twofold.

18 First, a regulatory infrastructure considering of  
19 regulations, standards, and Guides.

20 Secondly, to make timely licensing decisions.

21 Next slide, please.

22 (Slide.)

23 The program to meet these goals consists of the  
24 promulgation of regulations, the development of review  
25 methodologies, and acting on various licensing applications.

The regulations which we expect to be embodied in

CMW5

10 CFR Part 60 cover several areas.

General provisions, which include administrative procedures, require records, fees, timing, et cetera.

Type of waste, high-level, low-level, mill tailings, and for each type specific procedures will be developed as well, such as waste performance criteria, site suitability criteria, design and operating criteria.

That last item, remedial, there we are talking about things like abandoned sites, the NSS facility, et cetera.

The support of activities include such things as the development of the three-table review of the ERDA GAIS and working with Savannah River on the disposition of the military waste there, not the licenses, but to learn from them and help them.

Before I continue, what we handed out were a copy of the slides in addition to some backup material that sort of explains in somewhat more detail what could not be put on the slide, because of the constraint about size.

We also included in the handout some previous MBO tables and a list of application bases as well.

Next slide.

(Slide.)

We have a working definition of nuclear waste which is relatively simple.

That is, those materials that are radioactive and

cmw6 1 have no dollar value.

2 We expect to develop a de minimis level of activity,  
3 apart from our waste classification work, above which the  
4 regulatory program will fly.

5 We have not done that yet.

6 COMMISSIONER GILINSKY: What do you mean no dollar  
7 value?

8 MR. MYERS: That's a waste.

9 In other words, traditionally, wastes have no value.

10 COMMISSIONER GILINSKY: How do you regard spent  
11 fuel?

12 It may or may not have value.

13 It may have a positive value.

14 It may have a negative value at the present time.

15 CHAIRMAN HENDRIE: But hardly zero value.

16 COMMISSIONER GILINSKY: Hardly zero value, right.

17 MR. MYERS: That's on the next slide.

18 If it is part of the once-through cycle, and if  
19 it's decided you use the throwaway process, it is in fact waste.

20 It may have value to somebody else at some other  
21 time, but if one says that the process we are going to have  
22 is to once-through cycle, it's back to waste.

23 COMMISSIONER GILINSKY: I just wonder whether you  
24 need that part of the definition.

25 Whether there is some logical designation.

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1 CHAIRMAN HENDRIE: In any event, we understand,  
2 for whatever other language spent fuel is in this discussion.

3 MR. MYERS: Next slide, please.

4 (Slide.)

5 These are the traditional classes of waste now.

6 Spent fuel is up there first, and as I said earlier,  
7 if one decides that we are going with the once-through cycle,  
8 it's a waste.

9 If you decide you are going to reprocess, then  
10 it's a resource.

11 But we are planning right now for --

12 COMMISSIONER GILINSKY: There's no need to confuse  
13 the notion of waste as something; a common-sense definition of  
14 waste, is something you want to discard.

15 Certain radioactive products which you may want  
16 to keep around for a short period of time, and guard them,  
17 or you may want to put them away, never to get them back again.

18 You know, in a long period, but I guess -- I don't  
19 think the economics need come into the definition.

20 MR. MYERS: In part I --

21 COMMISSIONER GILINSKY: These are materials that  
22 need to be protected, depending upon what you want to do  
23 with them.

24 MR. MYERS: In some cases you have an economic  
25 resource.

cmw8

1           If one harks back to just the normal chemical  
2 waste industry, there are things like waste exchanges, where  
3 people actually -- one man's waste is another man's feed product.

4           When it has no dollar value, it ends up getting  
5 dumped into a chemical waste landfill.

6           If it has dollar value, it can end up in a waste  
7 exchange where someone pays for it.

8           It may be that for the case of nuclear fuel, one  
9 should not be concerned about the dollar value, but a tradi-  
10 tional, in talking about what is waste you are generally talking  
e 1       about something that has no economic value.

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2 COMMISSIONER GILINSKY: Let's take experimental  
3 fuel. The value of spent fuel. The value of spent fuel depends  
4 upon the price of uranium and the cost of reprocessing and  
5 a bunch of other things and it ought to flip in and out of  
6 your definition, depending upon how those parts fluctuate.  
7 You have to guard it anyway to protect it.

8 MR. MYERS: Let's say there was a final decision  
9 there would be no reprocessing. In my mind, it is a waste.  
10 But if one decides that you will reprocess, then it is not a  
11 waste.

12 Do you agree with that?

13 COMMISSIONER GILINSKY: You still have to protect  
14 it.

15 MR. MYERS: Yes.

16 MR. SMITH: Sure.

17 MR. MYERS: But there is a difference between protect-  
18 ing in some storage mode for 20 or 30 years, as opposed to  
19 burying it 500 feet down.

20 COMMISSIONER GILINSKY: You don't call it a waste  
21 for 20 or 30 years?

22 MR. MYERS: If it is stored, it could be considered  
23 not waste.

24 COMMISSIONER GILINSKY: That depends on a lot of  
25 decisions that we are not in a position to know the outcome  
of. That affects how we view the material.

bw2 1 Why don't you go ahead?

2 MR. MYERS: Past the spent fuel --

3 COMMISSIONER KENNEDY: At least you are supported  
4 reasonably well by Webster, if that helps you.

5 MR. MYERS: Thank you. We have also high-level  
6 military waste, low-level waste, mill tails and decommissioning  
7 residue.

8 I would like to now get into the substance of the  
9 waste management program in the context of its two major parts,  
10 high-level and low-level.

11 CHAIRMAN HENDRIE: Before you plunge forward, if  
12 I take the traditional classes, is there anything which --  
13 everything falls into one or another of these categories.

14 MR. MYERS: Just about.

15 CHAIRMAN HENDRIE: I guess it depends on how we  
16 define the categories.

17 MR. BISHOP: We can jump ahead a little bit. We have  
18 seen a problem with the classification of waste for us as  
19 regulators. Part of the program you saw in one of the  
20 handouts, in a block near the top on classification is part  
21 of our program and ongoing and Shelly will talk to that later.

22 We don't think, as regulators, these classes of  
23 waste do us very much good, and we have known that for some  
24 time, so we will come up with Class A waste and a Class B  
25 waste, and we will tell the world what those mean.

bw3

1 COMMISSIONER GILINSKY: By way of introduction.

2 MR. BISHOP: This has traditional classes. That is  
3 the way it is now.

4 CHAIRMAN HENDRIE: Well played.

5 MR. MYERS: I didn't intend it that way. Let's get  
6 into the high-level portion of the program first. Under our  
7 current traditional classification scheme, high-level includes  
8 spent fuel when it is once through.

9 Transuranics. NRC's authority --

10 COMMISSIONER GILINSKY: Let me return to that point.  
11 Why do you say when it is once through?

12 MR. SMITH: We have to be careful, because our  
13 current definition of high-level waste does not encompass spent  
14 fuel.

15 MR. MYERS: Well, the definition of high-level  
16 waste, as it appears in the Reg, has to do with the reprocessing  
17 cycle.

18 CHAIRMAN HENDRIE: It has to do with a particular  
19 chemical process, in fact. Doesn't it talk about a --

20 MR. MYERS: Yes, it does. But since the President's  
21 statement of April 7th, you must take the responsibility of  
22 spent fuel being disposed of.

23 CHAIRMAN HENDRIE: As the ultimate waste form?

24 MR. MYERS: Right. In that case, in my view, it be-  
25 comes a high-level waste.

bw4

1                   COMMISSIONER GILINSKY: Do we need to fix up that  
2 regulation or that definition in the regulation?

3                   MR. MYERS: When the decision becomes final one way  
4 or the other.

5                   MR. SMITH: When you made the point of what the  
6 definition is in the regulations, but we have to look at it as  
7 high-level waste.

8                   MR. MYERS: This is one of the uncertainties of trying  
9 to develop the program. When you speak in the traditional  
10 sense of high-level waste as a result of reprocessing cycle, you  
11 head toward disposal, et cetera. You can't take the exact  
12 same design and throw a spent fuel element in it, if you  
13 chose to dispose of it finally. It has to be a different kind  
14 of design.

15                  These are the uncertainties in terms of laying out  
16 a schedule, when the regulation comes out.

17                  COMMISSIONER GILINSKY: It seems to me the definition  
18 of high-level waste or the inclusion, let's say, of spent fuel  
19 in that definition, ought not depend upon whether or not 10, 20,  
20 30, 40 years from now, if you return to that material or not,  
21 to my opinion. It ought to depend on the current state of  
22 affairs. If it is pretty hot stuff, then it should be treated  
23 as high-level waste.

24                  MR. MYERS: It may affect the manner in which you  
25 take care of it for that 20 or 30 years.

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1                   COMMISSIONER GILINSKY: Sure.

2                   MR. BISHOP: The program we blocked out for you last  
3 January had two components, high-level and low-level components,  
4 and branches were established for those components.

5                   This slide shows the responsibility really of the  
6 high-level waste branch. Traditional classes, looking forward  
7 a little bit, which would follow, in Class A waste which are  
8 those wastes which must go to a repository or something pro-  
9 viding long-term isolation.

10                  Although this isn't necessarily high-level waste, it  
11 is what falls within the purview of that unit.

12                  MR. MYERS: Our authority to treat with high-level  
13 waste is also somewhat complicated. It depends in part on the  
14 source of the waste, whether it be an NRC license facility,  
15 government, foreign; the ownership of the facility, commercial  
16 or federal; and the duration of storage, whether it be long-  
17 term or short-term, depending upon how you like to define  
18 that.

19                  Currently, NRC licenses would be needed for all  
20 commercial facilities and federal repositories for high-level  
21 waste.

22                  If you want to include spent fuel in that, we can.

23                  COMMISSIONER GILINSKY: In fact, it is up to us, if  
24 we define it to be high-level waste, then we would have  
25 authority over the storage.

bw6

1                   MR. MYERS: Assuming someone didn't sue us and  
2 say, no, you can't. Right now we expect under these kinds of  
3 terms, the types of things that would require NRC licenses,  
4 would be federal storage of transuranics, short-term storage  
5 of high-level waste, Department of Energy research and  
6 development facilities and the existing storage of Department  
7 of Energy waste.

8                   Next slide, please.

9                   (Slide.)

10                  COMMISSIONER GILINSKY: Why wouldn't federal  
11 storage of transuranics fall under NRC's responsibilities?

12                  MR. MYERS: I believe the way the law is structured --

13                  MR. BISHOP: We lost our lawyer.

14                  MR. SMITH: Unless it is interpreted in law, we  
15 don't have a responsibility.

16                  All historical use of the terms "high-level" and  
17 "low-level" waste have been in the context of reprocessing.  
18 All of the laws and all of the legislative history we have  
19 looked over do not indicate the Congress in any way had  
20 transuranic waste on their minds.

21                  The law gives us the responsibility for the  
22 licensing of DOT, ERDA, then DOE, repositories.

23                  COMMISSIONER GILINSKY: This is the long-lived  
24 material that causes public worry.

25                  MR. BISHOP: De facto, I think we will end up

bw7 1 licensing the disposal of that material, because it will be  
2 in the same facility as the other waste.

3 COMMISSIONER GILINSKY: It seems to me we looked into  
4 this a year or two ago, and the lawyers were going back and  
5 forth with it. I don't know what the upshot of it was.

6 MR. BISHOP: They advised us, if it was a DOE  
7 facility, strictly for storage, it would not be subject to  
8 licensing.

9 COMMISSIONER BRADFORD: Is there a particular  
10 memorandum that spells that out?

11 MR. BISHOP: I don't remember. There probably  
12 is.

13 CHAIRMAN HENDRIE: It is probably not inconceivable  
14 there might not yet be some modification in the legislation,  
15 to clarify.

16 It may even be appropriate for the Commission to  
17 suggest such.

18 I think it depends on the use of the word "storage"  
19 and the use of the word "disposal" as written in the law.

20 So, if you start talking about storage, it is  
21 rather restrictive for us.

22 COMMISSIONER KENNEDY: Wasn't it for the duration?

23 MR. BISHOP: It was for high-level waste. The words  
24 of the law are "long-term storage of high-level waste."

25 MR. MYERS: As I remember, they don't mention

bw8

1 transuranics.

2 COMMISSIONER BRADFORD: So even disposal of  
3 transuranics would arguably be unregulated?

4 MR. BISHOP: If it is in a separate and distinct  
5 facility.

6 COMMISSIONER BRADFORD: Even if it were in the same  
7 facility, under that interpretation, it would be regulated  
8 beyond its interaction with the high-level waste?

9 MR. MYERS: We would license the facility, the pieces  
10 that go into it. What Phil is trying to say, what we know now,  
11 the way DOE is thinking, the TRU and the high-level would be  
12 the same place and we would license the facility.

13 COMMISSIONER GILINSKY: You are saying we would not  
14 license it, even if it is TRU from the commercial sector.

15 MR. BISHOP: If it is under DOE operation.

16 COMMISSIONER GILINSKY: It is a peculiar sort of  
17 gap.

18 MR. SMITH: In fact, this is something we would like  
19 to discuss a little with you. There is just some gaps.

20 COMMISSIONER KENNEDY: What is the significance of  
21 these gaps?

22 MR. SMITH: I think what it means, some of the overall  
23 waste management programs for the country, I don't think it  
24 is good --

25 COMMISSIONER KENNEDY: Why not? What is the nature

bw9

1 of the gap? What is the effect of the gap? The Federal  
2 Government is doing this.

3 MR. SMITH: The gap is a considerable amount of  
4 grayness as to who is responsible for what. I think we are  
5 really talking about a concerted regulatory program for waste  
6 management in the country. There are some areas that NRC  
7 needs to have filled in.

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1 CHAIRMAN HENDRIE: There is going to be a coherent  
2 program to manage the waste in any case. You have great difficulty  
3 in establishing such a program if the regulatory boundaries,  
4 if the boundaries of responsibility and authority are Mercalli-  
5 drawn and don't form a continuous coverage of the whole field.

6 Then you have areas, nobody knows who is quite supposed  
7 to do what about that. And those uncertainties are a consider-  
8 able difficulty in going forward with the program.

9 MR. BISHOP: From a technical viewpoint in direct  
10 answer to Commissioner Kennedy's question, the possibility  
11 exists that two materials which are similar in the long term,  
12 in terms of their hazards, could be dealt with under entirely  
13 different criteria, by two different operations. That is  
14 legally possible. Probably operationally unlikely.

15 MR. MYERS: And end up in different places. It  
16 is unlikely but possible.

17 Continuing on, the schedule you see before you is pretty  
18 much provided by the Department of Energy, and we track with  
19 them. The defense part and the commercial part, as you can see,  
20 are a year apart.

21 We expect to, in fact, we know, that the Department  
22 of Energy has -- is homing in on site. In fact, we just got a  
23 letter from them.

24 COMMISSIONER GILINSKY: These are two different sites.

25 MR. BISHOP: There is one site designated for defense

1 waste and there is a number of sites under investigation for  
2 commercial waste.

3 The answer is yes, they are different sites.

4 MR. MYERS: The defense one in '77 is that WIPP  
5 site.

6 There is no formal notification of that.

7 COMMISSIONER GILINSKY: Is there going to be defense  
8 waste ready to move into a long-term storage facility in 1983?

9 MR. MYERS: That is the plan.

10 We are working at Savannah River now to do that,  
11 solidify it, get it out there.

12 COMMISSIONER BRADFORD: What is the WIPP site?

13 MR. MYERS: Waste isolation plant.

14 COMMISSIONER BRADFORD: Where is that?

15 MR. MYERS: Carlsbad.

16 We just received a letter where DOE has requested  
17 it that it also be considered for high-level waste.

18 COMMISSIONER BRADFORD: From the commercial --

19 MR. MYERS: From defense.

20 MR. SMITH: One of the reasons, if you look at those  
21 days, you look at the schedule that NRC is on, with respect  
22 to establishing criteria for site selection and design, we  
23 begin to see a little problem that we are going to have. Here  
24 we have already picked the site. We haven't come up with a  
25 site criteria.

fm3

1                   MR. BISHOP: They haven't announced the waste form,  
2 but we happen to know from --

3                   COMMISSIONER KENNEDY: They are working to that end.

4                   MR. BISHOP: From their planning at the three sites  
5 they are expecting to have solid, to have it solidified. We  
6 have laid no criteria out for defense waste, nor have we been  
7 working on it, but we are following them and working with them  
8 closely in an informal way on the Savannah River site and  
9 soon on the Hanford site. Shipping the waste to this repository,  
10 the WIPP site is one of the alternatives under discussion for  
11 the waste at all three major defense sites. It is not a selected  
12 alternative yet.

13                  COMMISSIONER BRADFORD. What do you mean when you  
14 say you are working with them quite closely?

15                  MR. BISHOP: They come to brief us periodically.

16                  COMMISSIONER BRADFORD: Savannah River?

17                  MR. BISHOP: The DOE officials, as well as the Staff,  
18 comes to brief us on their processes. We have given them advice  
19 on such things as quality assurance, they have taken that advice  
20 and actually restructured some of the organization, to do the  
21 kind of quality assurance program that we would have a commer-  
22 cial operator do.

23                  COMMISSIONER BRADFORD: How much freedom will you  
24 have to develop criteria, if they have already made a commit-  
25 ment to Carlsbad?

fm4

1 MR. BISHOP: It could be a problem.

2 MR. SMITH: That is what I was mentioning earlier.

3 MR. BISHOP: We can still in the licensing process --

4 COMMISSIONER KENNEDY: How soon can you develop cri-  
5 teria?

6 MR. BISHOP: Not soon enough.

7 We have told them that in a Staff letter.

8 COMMISSIONER KENNEDY: Not soon enough for that site  
9 which is 1980 --

10 MR. BISHOP: In time for the licensing process, yes.  
11 Not in time for the site selection.

12 COMMISSIONER KENNEDY: If site selection was delayed  
13 to the point where it could coincide with your criteria, what  
14 date would site selection occur?

15 MR. BISHOP: As you will see later in the schedule,  
16 it will be next spring, that we have something in a draft form  
17 available which they could use. So it is not that much time.

18 MR. MYERS: Just to ease your mind a bit, we have  
19 draft material out now. In other words, have many people see  
20 early versions of the site suitability criteria, even  
21 though we don't expect to get them out for another year in draft  
22 form in the sense of having an impact statement.

23 Next slide, please.

(Slide.)

24 COMMISSIONER KENNEDY: I guess all I was saying, it  
25 looks like we could get rather easily into a Catch-22. We have to

fm5  
1 have a waste management site right now, or you have got to stop.  
2 licensing reactors is one cry I hear, but we can't get a waste  
3 management site until we get site selection criteria from  
4 another agency. That agency isn't ready to do that yet, so if you  
5 just wait long enough, you do have Catch-22. I guess I wouldn't  
6 want this agency to be part of an exercise of that kind. I am  
7 sure you wouldn't either.

8 MR. BISHOP: I think the Catch-22 is not quite as  
9 direct as you have indicated. The reason being, the criteria  
10 that gets used in the licensing process after receipt of an  
11 application. Indeed, DOE should have a preview of those, and  
12 they have.

13 COMMISSIONER GILINSKY: Also you are talking about 1977,  
14 you are talking about defense.

15 COMMISSIONER BRADFORD: Who decides DOE --

16 MR. MYERS: The criteria?

17 COMMISSIONER BRADFORD: Yes.

18 MR. MYERS: We have had workshops across the country,  
19 we have had peer groups. It is reviewed substantially. We  
20 have another group set up, environmental organizations. That  
21 would be on the last line. People that are involved in the pro-  
22 cess. We are trying to push the public participation concept  
23 rather heavily.

24 MR. SMITH: There is still a potential problem, I  
25 think that you are pointing at, when you come back and establish

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1 regulations and publish it in the Federal Register for comment,  
2 et cetera, et cetera, many people may have a different point of  
3 view, and they raise some issues that we didn't look at.

4 COMMISSIONER BRADFORD: And that process will be  
5 concluded --

6 MR. MYERS: For the waste packaging form, the site  
7 suitability criteria, design criteria, we expect to have draft  
8 regulations out April of '78. May of '78. I am sorry.

9 COMMISSIONER BRADFORD: Would you expect that final  
10 regulation?

11 MR. MYERS: Depending upon, if you don't get sued,  
12 we are planning 8 months after that. Which would be January  
13 of '79.

14 MR. SMITH: Some think we are unrealistic, allowing  
15 ourselves only 8 months, but that is as tight as we can be.

16 MR. MYERS: You put out a draft impact statement on  
17 the draft regulations and most agencies will wait to hear from  
18 selected agencies no matter how long it takes. If you want to  
19 live with the regulations, say, okay, 45 days or over and we are  
20 stopping, then anything after that date we are not going to look  
21 at, you then can proceed on some reasonable schedule. We could  
22 obviously surface that issue and say, we have not heard from  
23 X number of agencies; do you want to go ahead or not? That is  
24 one thing.

25 Obviously a lawsuit could delay, but the 8 months is

1 predicated upon going through the formal process of the 45 days  
2 review of the draft, a couple of months accommodating whatever  
3 comments, redoing it, getting it in final form, then you wait  
4 another 30 days after the final goes out before you--the regula-  
5 tions can affect it. It is a schedule that is predicated on  
6 nobody throwing a roadblock in your way.

7 COMMISSIONER BRADFORD: At that point, the commitment  
8 to the Carlsbad facility would be what, 13 months old?  
9 How much money would be likely to be spent?

10 MR. MYERS: The Carlsbad facility is about a year  
11 behind the commercial facility. A year ahead. So they expect  
12 to start operations in '83.

13 MR. SMITH: They are going to sink the shaft in '79.  
14 We are saying we wouldn't have our final things out until  
15 January of '79. So, yes, there would have been money spent.

16 COMMISSIONER KENNEDY: Two years would have elapsed  
17 as well.

18 MR. MYERS: Again it is not as if they are working  
19 in the dark.

20 COMMISSIONER KENNEDY: But the work that has gone into  
21 the site selection which will occur in December of 1977 has been  
22 going on for a year, so it would have been two years, effectively,  
23 that would have been lost. In other words, they have to go  
24 back and do it over again, you have to go through that site  
25 review process, which will take them a good year from that.

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1 That would then add to the licensing process, and then they would  
2 be able to think about sinking a shaft and we would be talking  
3 about 1985 before you would be digging a hole.

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4 Just to be sure everybody understands what is  
5 happening.

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1 MR. MYERS: We have gotten from DOE, that's their  
2 plan, we are trying to accommodate as best we can and what  
3 we think is reasonable to do.

4 What we are talking about is rather constrained  
5 because we are being quite optimistic.

6 The series of regulations we intend to get them  
7 out, the time schedule, are the administrative portions of  
8 the regulations, including the general portion of records,  
9 fees and timing.

10 The packaging and form of the waste, the site  
11 selection, site suitability criteria, design criteria, and waste  
12 classification comes out somewhat on the same time schedule.

13 The operation of decommissioning starts in the 1980  
14 time frame since we don't need that as early as we do the other  
15 material.

16 CHAIRMAN HENDRIE: The classification --

17 MR. MYERS: That's what Bill was talking about  
18 earlier in terms of Class A, Class B.

19 In other words, try to design a classification  
20 system that is dependent upon the kind of isolation you need  
21 as opposed to --

22 CHAIRMAN HENDRIE: Can you get the standards with  
23 regard to -- can you get the other items out, without  
24 having -- you know what the classification scheme that you  
25 would like to see is, I guess.

cmw2

1 MR. BISHOP: We know what the scheme is.

2 We don't know what the numerical limits dividing  
3 the class will be yet.

4 That's ongoing.

5 It won't be complete until next spring.

6 The classes quite simply from a regulatory viewpoint  
7 are driven by the ultimate disposition of the waste, so the  
8 classification scheme is what I laughingly call the Mikado  
9 principle, of letting the punishment fit the crime.

10 Since we have only the two disposal mechanisms  
11 available to us at the moment, a detailed deposit repository  
12 but there need only be for regulatory purposes two classes  
13 of waste. -

14 Those which may go to shallow land burial and  
15 those which must go to the repository.

16 The Class A waste, for which this particular chart  
17 is aimed, would be those materials which must go to the  
18 repository which need that kind of isolation.

19 As to what the limits are, dividing them from the  
20 others, we haven't established that.

21 So we can put out the administrative framework  
22 quite easily as well as some of the form criteria, technical  
23 detail, site, design, technical details for the repository.

24 The answer is yes, we can.

25 MR. MYERS: Next slide, please.

cmw3

1           The other work underway, the assessment capability  
2 to allow us to analyze a number of things.

3           First one would be the geologic isolation capability.

4           We expect to do that by May of '78.

5           Then evaluate the proposed design in May of '79.

6           MR. BISHOP: A quick note to be sure it's clear.

7           This will have capabilities available.

8           Not that we will have completed some sort of  
9 analysis by then.

10          The tools will be available to us at that point.

11          MR. MYERS: The next item is to work with the  
12 Department of Energy.

13          As I mentioned earlier, we have been giving them  
14 informal information.

15          We expect to formalize this in a number of ways.

16          One with a Staff technical position, by the 1st  
17 of next year, which is next month, and a Guide, Regulatory  
18 Guide, given the same kind of information in a formal way,  
19 by June of '79.

20          COMMISSIONER GILINSKY: What do they submit in  
21 the way of a license application?

22          MR. MYERS: That's what we have to tell them.

23          Content and format of the application.

24          Now, it's not at all clear at this stage of the  
25 game, whether you have a single licensing process, a dual

cmw4

1 licensing process, that has existed or what, but the idea  
2 of that kind of information will be to tell them what we  
3 want, what format we want it in.

4 MR. SHAPAR: It's not a facility.

5 Facility means production and utilization.

6 Under these concepts it's neither a production or  
7 utilization facility.

8 However, that does not mean that within the  
9 rubric of materials licensing we cannot construct a licensing  
10 framework that will give us an input with respect to site  
11 selection and start of construction and that type of thing.

12 We have done just that sort of thing, for other  
13 materials licenses, such as plutonium fabrication plants and  
14 the materials licensing activities of that nature.

15 COMMISSIONER GILINSKY: We require the environmental  
16 specimens be available before we proceed.

17 MR. MYERS: Before we issue a license.

18 MR. BISHOP: That is our present thinking, as we  
19 have transmitted, from Staff to Staff, to DOE.

20 We left a lot of options open.

21 We wanted the environmental statement and the  
22 safety analysis report thoroughly.

23 MR. MYERS: Let me jump to the last item,  
24 Savannah River, that's the technical assess work we mentioned  
25 earlier in terms of our cooperation with them.

cmw5

1           Those are the dates when they expect to have their  
2       planned safety analysis report and environmental report out.

3           We told them we would review them in somewhat  
4       greater detail.

5           We are on a continuing basis working with them,  
6       as all of these are being developed.

7           In fact, I think they are quarterly meetings.

8           There was one a couple of months ago and there's  
9       one coming up this month or next month.

10          The NFS, that one is sort of flaky, in the sense  
11       of Federal Register notice and a draft impact statement.

12          Some while ago we published regulations on the  
13       treatment of high level waste and excluded the NFS facility  
14       and said rulemaking will follow, and we are still tracking  
15       that commitment in terms of rulemaking.

16          Whether or not that November of '78 date has meaning  
17       in the impact statement a year later would depend upon a whole  
18       range of things.

19          As you know, there's ongoing work right now.

20          There has been work on what to do with that  
21       facility, what it costs.

22          DOE had another million bucks to relook at it  
23       and sort of it's in limbo in a sense, is in DOE's lap, in  
24       terms of making a decision or recommendation to what should be  
25       done with it, how much it's going to cost, who pays for it.

cmw6

1 COMMISSIONER GILINSKY: Technically, it's much  
2 like the defense waste.

3 MR. MYERS: It is defense waste.

4 600 gallons is the biggest chunk.

5 That's defense waste.

6 MR. SMITH: There's 600,000 gallons of high level  
7 waste, but a lot of it is fuel they got from the government.

8 The way the waste has been neutralized is that  
9 one has sludge accumulating in the bottom and the difficulty  
10 arises as to how to remove that.

11 The same problem they have in the defense waste.

12 COMMISSIONER GILINSKY: The difference is, this  
13 is a -- was a licensed plant.

14 MR. SMITH: That's right.

15 COMMISSIONER GILINSKY: But it poses the same technical  
16 problems.

17 MR. SMITH: Same technical problems in general as  
18 some of the older tanks.

19 That is how do you get the stuff out of there?

20 If you decide you want to remove that waste from  
21 those tanks, and do something else with it, you first have to  
22 overcome the technical problem of how to get it out of there.

23 CHAIRMAN HENDRIE: I had occasion to meet recently  
24 with some of the New York State people and we have asked the  
25 Department of Energy people to do a technical report for us.

cmw7

1 Is that coming along or do you perceive --

2 MR. MYERS: It's coming along.

3 MR. BISHOP: It's underway.

4 CHAIRMAN HENDRIE: No change in the status from  
5 our discussions with New York State?

6 MR. BISHOP: No.

7 COMMISSIONER GILINSKY: What part of the record  
8 does it answer?

9 MR. BISHOP: There was an earlier report that  
10 looks at technology under development at ERDA sites.

11 We have looked at that, saw some we thought needed  
12 further exploration.

13 We also had some outside the scope of that report  
14 which we thought ought to be explored.

15 We asked ERDA to look at those in some depth.

16 They have put that in as a major element in their  
17 looking at the site as a whole.

18 COMMISSIONER GILINSKY: Why can't they do what they  
19 plan to do at Savannah River?

20 MR. BISHOP: That's one of the alternatives.

21 CHAIRMAN HENDRIE: It may be possible to do that.

22 As I understand what needs to be done, there needs  
23 to be a clear understanding of the best technical solution for  
24 waste value.

25 Then you can move ahead with an appropriate

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1 rulemaking, in order to provide a regulatory basis to process  
2 and transport that fuel.

3 MR. MYERS: That would be lovely, if it could be  
4 done that way.

5 I try to get across the whole thing is fraught with  
6 unknowns, such as, it's been suggested the Federal Government  
7 take over the whole facility, use it as a storage, waste  
8 disposal site, for example.

9 Right now the biggest problem --

10 CHAIRMAN HENDRIE: There are a variety of options,  
11 but at least with regard to the DOE study, the attempt is  
12 to thrash out and be satisfied that they know what the  
13 viable options are from an engineering and safety standpoint.

14 And then hopefully not allow whatever the political  
15 considerations are, to move in directions that don't conform  
16 with those safety --

17 MR. MYERS: I agree.

18 I expect what would come out of the report would be  
19 a way to solve the problems and then somebody has to bite the  
20 bullet and decide how.

21 That's going to be a toughie.

22 CHAIRMAN HENDRIE: I think Congress has the only  
23 jaw tough enough to do that.

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1 MR. MYERS: Next slide.

2 (Slide.)

3 This is the last one on the high-level program.

4 It gives you a first cut at the schedule for repository  
5 licensing. You will know there are four commercial facilities.  
6 It it is not at all clear at this stage of the game whether there  
7 will be four or not. We have not heard otherwise. The original  
8 plan was for four.

9 MR. BISHOP: The original plan was for six.

10 MR. MYERS: They have cut back two. But we still  
11 have plans for looking at four commerical facilities.

12 COMMISSIONER KENNEDY: Plans for looking at them?

13 MR. MYERS: In other words, our plans as respect  
14 license applications.

15 MR. BISHOP: One of these would have capacity for  
16 the waste until about the year 2000 --

17 COMMISSIONER GILINSKY: Is it a matter of making the  
18 underground part bigger?

19 MR. MYERS: It could be you have one site that is  
20 a big, massive site.

21 It could be that it would make more sense to have  
22 one located in the Midwest and one on the East Coast and one  
23 on the West Coast kind of thing.

24 COMMISSIONER GILINSKY: Equity.

25 MR. MYERS: Transportation. One of the biggest

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1 problems in management of waste is moving it. There is that  
2 kind of thinking, too. Also, it might be, you want to make  
3 sure you have enough.

4 MR. BISHOP: There is one classification. There  
5 are some geologic media which look like they would be quite  
6 good for this kind of disposal.

7 It seems prudent to explore them all. That is why  
8 they are thinking of several sites.

9 The present plan which we learned last month is to  
10 select two sites in salt and explore the Hanford site and the  
11 Nevada test in some detail, to see if they are geologically  
12 suitable.

13 COMMISSIONER GILINSKY: Who in DOE has responsibility  
14 for all of this?

15 MR. MYERS: Good question. I don't mean to be  
16 facetious. The people that were there seem to have left.

17 MR. SMITH: One of the things I was going to talk  
18 about at the end, the problem of overall national waste manage-  
19 ment program in which all of the various agencies' schedules  
20 are fitted in, who are the people that have the lead roles?

21 At DOE, it is basically right, correct me if I am  
22 wrong, concentrated under Bob Thorne's shop and Woody  
23 Cunningham. As you know, Mr. Thorne is acting. I presume a  
24 lot of them are acting. Some of those have left and gone  
25 other places. So it hasn't settled down yet as to who is going

1 to be the lead driving force there, that individual for waste  
2 management.

3 COMMISSIONER GILINSKY: Cunningham has other  
4 responsibilities.

5 MR. SMITH: Yes. He has very broad responsibilities.  
6 Waste management is just one of them.

7 MR. MYERS: I would like to know go on to the low-  
8 level waste program.

9 (Slide.)

10 Again, this is the current way we classify low-level  
11 waste. It includes those wastes that go to shallow land burial,  
12 mill tailings, decommissioning residue and other materials, such  
13 as gases.

14 Any question on that breakdown?

15 Next slide, please.

16 (Slide.)

17 COMMISSIONER GILINSKY: When you say "decommissioning  
18 residue," is that referring to reactors?

19 MR. MYERS: We were careful not to use the word  
20 "decommissioning facility." It depends. If you dismantle a  
21 reactor and have pieces of it laying around that have to be  
22 put someplace, it could be pieces of reactors, once the  
23 reactor license is terminated.

24 MR. SMITH: But you are including an aspect of it  
25 in there.

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1                   COMMISSIONER KENNEDY: It could be a variety of  
2 other things.

3                   MR. MYERS: A variety of other things.

4                   CHAIRMAN HENDRIE: How would one class a decommissioned  
5 plant?

6                   MR. MYERS: Processing plant.

7                   CHAIRMAN HENDRIE: Reactor plant.

8                   MR. MYERS: It depends upon how you decommission it.  
9 In other words, if you mothballed it or teamed it --

10                  CHAIRMAN HENDRIE: If I mothball it, it sounds a  
11 little bit like it is on a standby license from the facility.

12                  MR. SHAPAR: Mothball intact, they have an ownership  
13 license.

14                  CHAIRMAN HENDRIE: Let's suppose we tore out what  
15 seemed to be the more highly contaminated elements, shift  
16 over to someplace else and they become decontamination residues.  
17 There remained behind -- it remains behind the foundation  
18 structure, themselves, underground which continue to have at  
19 least a mild level of radioactivity, and in this particular  
20 case, if you knock down the containment shell, put it over  
21 the foundation and shells, now what happens --

22                  MR. MYERS: It is materials license.

23                  MR. SHAPAR: Assuming the reactor is substantially  
24 removed.

25                  MR. MYERS: If it were less than the quantity one

bw5      1 would license in any case, it would be an unrestricted use  
2 site.

3            CHAIRMAN HENDRIE: Suppose it is more than that,  
4 but still not enough to require all that concrete to go into  
5 high-level disposal?

6            MR. MYERS: It could become a de facto waste site.

7            MR. BISHOP: De facto disposal site. For planning  
8 purposes, that is why we include that as a line item for  
9 study under the waste management program.

10          MR. MYERS: I thought it might be worthwhile to  
11 mention the current federal-state roles for shallow land burial.  
12 The ownership of the land is federally-owned; long-term care  
13 is in the hands of the states.

14          Although there has been a recommendation from a  
15 task force that the Federal Government is responsible for  
16 long-term care, as well.

17          COMMISSIONER GILINSKY: If I can interrupt you and  
18 go back to the federal repository. What about the repositories  
19 for the commercial waste? Are they designed to handle spent fuel  
20 or what?

21          MR. BISHOP: DOE plans to have those repositories  
22 capable of handling disposal for spent fuel or disposal of high-  
23 level waste.

24          In terms of our program, although the high-level  
25 waste, because it started first, we are completing our work on

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1 it first, we have added the element of spent fuel to our  
2 study of the repositories, as well, and are trying to move that  
3 as quick as we can.

4 The direct answer is yes, indeed.

5 COMMISSIONER GILINSKY: Will they be retrievable?

6 MR. BISHOP: That is a separate consideration.

7 It could be.

8 MR. SMITH: It is our understanding that there is  
9 some discussion, there is a great deal of discussion going on,  
10 that they are looking for a repository, that would handle  
11 spent fuel or solidified high-level waste and that would be  
12 retrievable.

13 That then begins to pose some real problems.

14 CHAIRMAN HENDRIE: Start a little earlier.

15 I just missed it. I am sorry.

16 MR. SMITH: Initially, we were talking about  
17 solidifying high-level waste in a deep geologic disposal  
18 repository that would probably not be retrievable.

19 Now, we have shifted into an area where we are  
20 talking about either solidified high-level waste or spent  
21 fuel in a deep geologic repository, with the retrievability  
22 built in.

23 That may mean then repositories in different kinds  
24 of geologic formation.

25 MR. BISHOP: And different design.

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1                   MR. SMITH: Different design. It is that last aspect,  
2 as to whether or not they want that retrievability built in  
3 as an option for both. Then that I think is still in the  
4 state of flux.

5                   So you might say we are hanging loose, to move in  
6 either direction.

7                   MR. MYERS: It is conceivable you could end up with  
8 one facility that is really a high-level waste disposal site,  
9 and drawn explicitly for storage of long-term spent fuel.

10                  If you wanted to leave it there you could. That  
11 is one of the options.

12                  COMMISSIONER GILINSKY: It seems unlikely you would  
13 have waste coming out of commercial reprocessing plants by  
14 whenever, and solidified and everything else, so why would  
15 one be pressing?

16                  We are talking about different facilities.

17                  As far as the commercial facilities go, why would  
18 anyone be looking at anything other than spent fuel at the  
19 present time, particularly, if you are really pressed in your  
20 schedule?

21                  MR. MYERS: That is a consideration.

22                  CHAIRMAN HENDRIE: I think it is fair to plan ahead  
23 and just be sure you go down what seems to be the main track.

24                  At the moment you are not constructing a framework which is  
25 just incompatible with other ways that you may have to go.

bw8 1 COMMISSIONER GILINSKY: I am not suggesting leaving it  
2 out, but you are talking about a pretty optimistic schedule,  
3 certainly for your first facility.

4 Why would you in that case be looking beyond.

5 MR. MYERS: Just remember we started out looking  
6 at the high-level waste from the reprocessing plant to be  
7 solidified.

8 We could just cut it over now and just drop that.

9 COMMISSIONER GILINSKY: Why not keep that option open for  
10 the subsequent facilities? You laid out four facilities there  
E5 11 you are talking about.

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1 MR. SMITH: I think there's another problem here.  
2 Commissioner Kennedy mentioned it earlier. That is, I think DOE  
3 is well aware that unless they demonstrate that we indeed have  
4 a permanent repository, final solution for the high level waste  
5 problem, that from the energy standpoint, the nuclear program  
6 is in trouble, so --

7 COMMISSIONER GILINSKY: Why do you have to demonstrate  
8 it beyond spent fuel?

9 MR. SMITH: Because they haven't made a decision, is  
10 spent fuel in a repository the ultimate solution?

11 I think they want to proffer the best solution.

12 One would be to solidify high level waste and take  
13 military waste and put that down.

14 COMMISSIONER KENNEDY: I would not, but one could  
15 argue, not having proved the second solution, would immediately  
16 rule out any subsequent decision to reconsider reprocessing.  
17 There simply would be no solution.

18 COMMISSIONER GILINSKY: You are just on a different  
19 schedule. If you are really pressing, you want to get a fa-  
20 cility opened up and used, certainly it is more complicated to  
21 add more requirements, you know, that that facility has to  
22 satisfy.

23 The simplest thing to do would be simply to deal with  
24 the question of disposal of long-term storage of spent fuel and  
25 put the other one on its lower track.

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1 MR. BISHOP: I think what you are talking about is  
2 the DOE plan, not ours.

3 Our plans are tracking what we suspect --

4 COMMISSIONER GILINSKY: I am talking about the DOE  
5 plan.

6 MR. BISHOP: I think their logic is, they want to,  
7 because the President said, defer indefinitely, have both options  
8 covered so because some day we will dispose of something and we  
9 don't yet know which it will be.

10 COMMISSIONER GILINSKY: I am not suggesting that you  
11 drop one of the options. I am saying if you are in a tremendous  
12 hurry, you don't need to carry all that extra baggage along in  
13 dealing with the first facility.

14 MR. BISHOP: There is an implicit assumption in that.  
15 That is, there is something substantially different you would  
16 have to do in terms of design and high level waste, in terms  
17 of the repository.

18 COMMISSIONER GILINSKY: Somebody earlier said there  
19 was.

20 MR. BISHOP: We are not sure they have significant  
21 impact on our criteria or even, for that matter, on other than  
22 the spacing of the canisters, much impact on the design.

23 COMMISSIONER GILINSKY: The differences are slight, but  
24 it doesn't matter.

25 MR. MYERS: There are differences. If you thought

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1 it the concept of retrievability, then they are substantial.

2 CHAIRMAN HENDRIE: We are much down on the time, so  
3 I would like to push ahead.

4 MR. MYERS: Let me finish up quickly on the current  
5 roles in terms of federal and states. These are licensed by  
6 either agreement 'states or NRC and disposal is NRC.

7 Next slide, please.

8 (Slide.)

9 Land ownership, this is the current regulatory role  
10 with regard to mill tailings. Right now the land ownership  
11 will be private. It depends upon where you get the land from  
12 and in some cases it is government land that is being mined  
13 and the tailings are disposed of in federal land so the Federal  
14 Government owns the land as well.

15 The long-term care funds are state responsibility.  
16 What is meant here is the concept of an insurance policy. We  
17 have worked out with agreements with the states of Wyoming and  
18 Utah, whereby the company who is doing the milling and disposing  
19 of the tailings gets a surety bond from some insurance company,  
20 the beneficiary is the state. If for one reason or another,  
21 the company is not there at the time reclamation needs to be  
22 done, its insurance company pays off to the state. The state  
23 does the work. If the company is still in business they do the  
24 work and the state never gets involved. That is what that  
25 means.

fm4 1 Right now licensing operations in either agreement  
2 states or NRC responsibility.

3 Post operation. Once the milling is done and we  
4 no longer have a license, it becomes state or EPA responsibility.

5 Now, we have, as you know, prepared, approved going  
6 ahead with legislation to get that kind of authority for NRC, so  
7 that we can have a more, in my mind, a more efficient way of  
8 dealing with the problem.

9 Right now, if nothing is done in the way of beefing  
10 up NRC's authority, EPA under the Resource Conservation Recovery  
11 Act, defines mill tailings at the site, hazardous site that will  
12 come under the ambit of their hazardous waste regulatory program  
13 which will be done in part by them and part by the states.

14 Next slide, please.

15 (Slide.)

16 This is the schedule for low level waste, similar to  
17 the high level waste program, and you can see that we expect to  
18 get the shallow land burial regulations in April of '80. Draft  
19 form final, December of '80. All of those are 12 months after  
20 the draft.

21 Again the same concern is right here. These are  
22 optimistic dates for the final. It could be impacted by any  
23 number of things, particularly legal suits and waiting for  
24 people to comment.

25 We will get out guidelines on federal/state roles.

fm5

1           The last one is alternatives to shallow land burial.  
2 Bill mentioned earlier, right now there are two ways to get  
3 rid of something. Either shallow land or geologic responsibility.  
4 We are looking at the other ways to dispose of the waste.  
5 Such things as sea burial, which is onerous to a number of  
6 people, but I have heard there is not much difference in burying  
7 in geologic sites at sea as well as on shore. So this study will  
8 look at a number of other ways of disposing of low level waste.

9           Next slide, please.

10           (Slide.)

11           We expect to put out rules on mill tailings in  
12 February of '79, draft form.

13           Decommission of facilities, decommissioning residue,  
14 treatment of same, by July of '79 and the radioactive gas dis-  
15 posal by January of '81, with the finals to be coming out 8  
16 months after.

17           Next slide, please.

18           (Slide.)

19           Now, some licensing actions are going on right now,  
20 as you all are probably familiar with the Sheffield site. We  
21 plan to have a draft impact statement and safety analysis report  
22 finished in July of '78. There was a lot of problems with  
23 Sheffield, but not the site itself. Just the administrative  
24 paraphernalia in terms of renewing the license.. We have asked--  
25 the renewal application came in for modification of the site.

fm6

1           We asked for the environmental report. They provided  
2 us and it is mostly proprietary and we spent a year almost  
3 negotiating with them in being able to use their environmental  
4 report to write our impact statement.

5           COMMISSIONER GILINSKY: The environmental report was  
6 proprietary?

7           MR. MYERS: Large parts of it.

8           MR. BISHOP: They have removed that proprietary  
9 label from almost all of the report.

10          MR. MYERS: But it took almost a year back and forth.

11          CHAIRMAN HENDRIE: What was their problem?

12          MR. BISHOP: Their feeling was the details of their  
13 operation gave them a competitive edge on other shallow land  
14 operators and therefore it was proprietary.

15          CHAIRMAN HENDRIE: I see. Fair enough.

16          MR. MYERS: The reassessment line there is essentially  
17 looking at the other shallow land burial sites. There are  
18 about 5 or 6 around. To see whether or not work needs to be  
19 done to correct any problems that exist.

20          The last item is essentially a technical assistance  
21 effort on our part from the State of New Mexico who has re-  
22 ceived an application for a new shallow land burial site from  
23 Chemical Nuclear Company for a shallow land burial site in New  
24 Mexico, and we are working with them.

25           Next slide.

fm7

1 (Slide.)

2 Here you can see the actors in the game of waste  
3 management proposal. MMSS has the overall lead. Standards  
4 and Research are participating, to develop program managers for  
5 their particular parts of the program. Such as risk assessment,  
6 research management, for Research and Standard Development  
7 will promulgate the regulation and guides and has the lead in  
8 decommissioning studies.

9 DLD, expert support on a continuing basis.

10 NRL is expert, in terms of hydrologies, geology  
11 and OSP has provided coordination with a number of states.

12 Next Slide, please.

13 (Slide.)

14 This gives you a graphic indication of the growth  
15 of the waste management program over the last couple of years.

16 You can see it is rather dramatic. This is for MMSS only.

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dkw

1                 The next slide will give you an indication of  
2         the other actors and what their roles are.

3                 Next slide.

4                 (Slide.)

5                 This shows the various organizations that are  
6         involved in the program, and the resources that are  
7         committed to it over the last 3-year period.

8                 MR. SMITH: The totals. Initially, we had a  
9         bottom line of totals.

10                CHAIRMAN HENDRIE: It's in my printout.

11                MR. MYERS: One of the problems is, when you put  
12         these things together, there is a manual that says what you  
13         can put on the slides, so it can be read; then you just drop  
14         things off. It's bureaucratic.

15                If you want to get it done, you got to follow the  
16         rules.

17                CHAIRMAN HENDRIE: You didn't expect to come  
18         down and deal with this commission without a certain amount of  
19         bureaucratic control, did you?

20                MR. MYERS: But not in the slides. You will notice  
21         that --

22                CHAIRMAN HENDRIE: Complete coverage: That is our  
23         aim.

24                MR. MYERS: You will notice I & E has 14, 15, 16  
25         individuals. They are involved right now in inspecting

dkw 1 existing sites for treatment of waste. They are not involved  
2 right now in the program we went through.

3 On the other hand, NRR is not on there at all.  
4 These figures come from the controller's office. NRR, who  
5 is not on there at all, had been providing on a continuing  
6 basis 5 to 10 man-years of effort to help us with this pro-  
7 gram. Research, which has 1, 2, and -- 2 and some money,  
8 has been providing more than that, and in the future should  
9 be providing even more.

10 COMMISSIONER GILINSKY: The 14 inspectors are  
11 inspecting shallow burial sites?

12 MR. MYERS: That — reactor sites, how they get  
13 rid of their waste. It's an across-the-board function of I&E  
14 that is charged against the waste management.

15 MR. SMITH: The only low-level burial site that we  
16 license is Sheffield. They, of course, inspect Sheffield.

17 What you do with the low-level waste from  
18 reactors, they inspect that.

19 MR. MYERS: It's mostly looking at reactor sites  
20 and what they do with the waste that comes out.

21 COMMISSIONER GILINSKY: You mean their spent fuel  
22 pool?

23 MR. MYERS: The residue from an ion exchange column

24 COMMISSIONER KENNEDY: Before it's removed.

25 COMMISSIONER GILINSKY: Allocating that part of the

dkw 1 inspection to that.

2 MR. GOSSICK: Activities like the site in  
3 California, in Nevada. Remember, when this stuff -- what  
4 was the name of it? Beatty? -- transportation of low-level  
5 waste our guys inspect --

6 CHAIRMAN HENDRIE: I assume this would include  
7 I&E's contribution to the yellow cake spill, regional  
8 office involvement in that?

9 A lot of man-days go into one of these.

10 MR. MYERS: Next slide.

11 (Slide.)

12 This is the last one. I merely shows the various  
13 agencies that are involved. There are not a great many. Us,  
14 DOE, and EPA, with the USGS providing expext assistance in  
15 their particular area.

16 A more interesting aspect is the public  
17 involvement. I mentioned earlier, public participation in  
18 terms of developing these standard guidelines for regulations  
19 is a new effort on our part, and we had workshops across the  
20 country, peer review groups. We are setting up another  
21 meeting with environmental groups. The whole idea is to  
22 expose, before you put in the Federal Register, a draft of  
23 something. Most people in the outside world feel once you put  
24 it in a Federal Register everybody's mind is made up.

25 We felt one way to get over that was to get the

dkw5

1 comprehensive overall federal schedule for this problem of  
2 priority setting, so that all of the players know exactly  
3 what the schedules are that we have to meet. And we can  
4 begin to move on.

5 Right now, as you can see, it is very difficult.  
6 Things change sometimes from day to day.

7 The third point I would like to mention is that  
8 there does appear to us to be a need for some focal point in  
9 this whole area. I hate to classify it as disputes, but  
10 where we run into differences of opinions between various  
11 agencies, all of which have a part to play in this particular  
12 sense.

13 Those three things are things that bother us a great  
14 deal. We don't have any magical solutions for them. But  
15 they are things we think need to be addressed.

16 At some point we would like to look at the need  
17 for consideration of perhaps expanding the authority, our  
18 authority, NRC's authority with respect to waste management.  
19 That is, those things, we would like to make it very clear,  
20 the interface between DOE, NRC and what NRC ought to  
21 license.

22 MR. BISHOP: And EPA.

23 CHAIRMAN HENDRIE: Will this require legislation?

24 MR. MYERS: It is conceivable.

25 MR. SMITH: I would defer to Howar on that.

dkw 1 interested and affected groups involved very early on, so  
2 we can see things and change them when nobody's professional  
3 pride is on the line.

4 CHAIRMAN HENDRIE: Do you want to provide some  
5 summary comments?

6 MR. SMITH: I just wanted to mention two or  
7 three things that all of us on the staff are concerned about.  
8 I'm sure you are well aware of them, too.

9 That is, one is the overall coordination of  
10 schedules with regard to EPA activities, DOE's activities,  
11 and the NRC. If you examine them, particularly their  
12 relationship between EPA and NRC, the schedules are not  
13 consistent, and there is some work that has to be done there.

14 Otherwise, we could have some problems as we come  
15 down the road.

16 COMMISSIONER GILINSKY: Wasn't there at one point  
17 an OMB coordinating group?

18 MR. MYERS: There was.

19 MR. SMITH: But very general. Bill, you were  
20 there.

21 MR. BISHOP: Apparently, OMB felt at the time the  
22 Energy Resources Council put out a report in late '76, and  
23 there had been no activity on that.

24 MR. SMITH: The other area is, I feel very strongly,  
25 and Bill and I have talked about it, that we need a

dkw

1                   MR. SHAPAR: It depends on how far you want to  
2 push it. Our authority over ERDA or DOE now is restricted  
3 to high-level waste. There is some confusion about what  
4 "high-level" means, whether it embraces transuranics, that  
5 type of thing.

6                   I think Mr. Gilinsky's point was well taken. What  
7 you are really interested in is what the safety hazard is,  
8 not whether it came from one source or the other, or what the  
9 traditional definition has been.

10                  There is a certain flexibility in the statute, and  
11 depending upon what your decision is, we may be able to give  
12 a reasonable interpretation of it that would, perhaps,  
13 obviate the need for further legislation.

14                  With respect to certain kinds of —

15                  CHAIRMAN HENDRIE: I assume that even under a  
16 somewhat ragged statutory framework, if everybody else in  
17 town was as reasonable and as well informed as we are, that  
18 agreement could be reached to get everything well coordinated  
19 and everything would work fine.

20                  However, under the present legislative framework,  
21 would such a set of agreements stand whatever challenges might  
22 be mounted, calling for judicial review and so on, which  
23 would then be based on the statutory language?

24                  MR. SHAPAR: They may not, I think is the short  
25 answer. One of the reasons sometimes for getting

dkw 1 legislation is what we call "clarifying legislation." We  
2 had queries like whether the ERDA waste tanks at Hanford  
3 fell within the statue, or whether it didn't. It was a  
4 tough decision for this commission to make.

5 One of the options we will have is whether  
6 borderline questions like that ought to be clarified by  
7 legislation. I think it's premature to decide it now, until  
8 Cliff and the conferees decide it.

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gsh 1 MR. MYERS: Mill tailings -- it's clear to me  
2 unless we amended the Atomic Energy Act and give NRC  
3 authority over those mill tailings, they will be regulated  
4 by the EPA and perhaps the states.

5 COMMISSIONER KENNEDY: What's wrong with that?

6 MR. MYERS: What's wrong is they come in at  
7 the end of the program. We can do a better job of  
8 regulating those mill tailings when you start.

9                   In other words, when you are sitting down with  
10          the perspective operator and deciding where he will put --

11 CHAIRMAN HENDRIE: Before he operates the mill.

12 MR. MYERS: Before he operates the door. That's  
13 one point.

14                   COMMISSIONER KENNEDY: I don't see why, if EPA  
15       is regulating — I'm trying to get my own thinking clear --  
16       I don't see why if EPA is regulating at that point, has a  
17       set of rules which will apply, we can't take those into  
18       consideration when we sit down and license them in the  
19       first place.

20 MR. MYERS: I think the problem has been on the  
21 old mills where we didn't have an environmental handle to  
22 begin with. That has been the main problem.

23 COMMISSIONER BRADFORD: That's also the case in  
24 which Shelley's first reason wouldn't apply.

25 MR. MYERS: A second point, just from the

gsh 1 stendpoint of the poor guy that's out there to get a  
2 license, you can go one place; you know, the concept of  
3 one-step licensing.

4 That's opposed to going here and getting a  
5 license and going somewhere else and argue about getting  
6 another license after it's all over, even though there  
7 may be rules and regulations out.

8 The way the conservation act reads, it says if  
9 something is -- if the Atomic Energy Act is in there,  
10 they won't regulate. So the format is already set up.

11 MR. SHAPAR: I would add on this general subject  
12 also that the committees in Congress may have their own  
13 independent views about what ought to be licensed and what  
14 ought not to be licensed in this area.

15 MR. SMITH: That's been reflected in the Clean  
16 Air Act.

17 CHAIRMAN HENDRIE: I will note for the  
18 commissioners' benefit there is an attachment at the back  
19 of the handout on slides which list the study papers in  
20 this area that are far enough along to have numbers assigned  
21 to them. So that you may find that a useful reference as  
22 we look at individual papers that come up.

23 COMMISSIONER BRADFORD: Is there any impediment  
24 to your doing an assessment as quickly as possible of what  
25 the specific areas are, what the disputes are, whether

gsh 1 legislation is needed, and, in effect, getting that  
2 process in the works?

3 It can take an awful lot of time to negotiate  
4 an interagency agreement. The sooner we begin, the  
5 sooner we finish.

6 MR. SMITH: No. Bill has done a lot of work  
7 in working with Howard's people in those areas that are  
8 grey areas such as transuranics.

9 We have that pretty well laid out as to where the  
10 grey areas are and, therefore, clarifying legislation would  
11 make it that much sharper.

12 MR. SHAPAR: Don't we have a staff paper  
13 circulating right now?

14 MR. SMITH: Yes, dealing with that.

15 CHAIRMAN HENDRIE: It's not on the numbered  
16 list of papers.

17 MR. MYERS: While mentioning papers, there are  
18 a number of papers in the mill and on the way up that will  
19 fit neatly in the context we talked about this morning.

20 MR. GOSSICK: It didn't get in this package.  
21 We might send it down separately.

22 CHAIRMAN HENDRIE: If it's in a suitable stage,  
23 I think it's helpful to the commission to have someplace  
24 a summary of what we believe is in progress in the staff, in  
25 the ways the management area, as well a number of others.

gsh 1            But we are talking about waste management  
2        today. So this list of papers that has progressed to  
3        the point of being dignified by numbers, and so on,  
4        we have that. But there are other initiatives underway.

5            It would be useful to have that.

6            MR. SMITH: A general answer to your question:  
7        I have asked the staff to look at the waste management  
8        program from the standpoint of what do we think NRC needs to  
9        do the job the way we think it ought to be done, notwithstanding  
10      what the present law says, or what regulation says.

11           If there are gaps, let's propose to the  
12      commission what the staff feels we need in order to do that  
13      job the right way.

14           We are working on that right now.

15           COMMISSIONER BRADFORD: When might we see that  
16      assessment?

17           MR. SMITH: When we get it circulated --

18           COMMISSIONER GILINSKY: We don't immediately  
19      have to have answers, but it would be nice to know.

20           MR. SMITH: -- what the problems are. Why don't we  
21      try to put a paper together, what we see are the gaps,  
22      the problem areas, in terms of the total program.

23           CHAIRMAN HENDRIE: An information paper. We  
24      will see if it's appropriate to schedule another commission  
25      discussion.

gsh 1                Okay, then, with no further comments —

2                COMMISSIONER KENNEDY: I would add one comment.

3                I found that advance information to be extremely helpful  
4                in my preparation before the meeting.

5                I compliment you for an outstanding piece of  
6                work.

7                Let me add my thanks to the staff for this  
8                commission, which I think has been very useful and will  
9                help.

10               It provides us now a context for a number of things  
11               and alerts us to areas in which in which I think the  
12               commission really ought to begin to move forward: the  
13               reorganization on the executive side, in the energy field.  
14               They are certainly trying to move ahead aggressively and  
15               effectively, but there is a certain amount of turbulence  
16               over there in terms of personnel assignments.

17               I think that if anything increases the need for  
18               the commission to be very clearly aware in all of these  
19               areas what's needed and to keep saying what we think is  
20               needed -- so we will be interested in the information  
21               paper and in the subsequent detailed considerations on  
22               particular points coming along.

23               So thank you very much.

24               (Whereupon, at 10:45 a.m., the meeting was  
25               adjourned.)

