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1 UNITED STATES OF AMERICA

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3 NUCLEAR REGULATORY COMMISSION

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5 STRATEGIC ASSESSMENT AND REBASELINING

6 STAKEHOLDERS PUBLIC MEETINGS

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8 ASSURING SAFE MANAGEMENT OF NUCLEAR WASTE SESSION

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10 FRIDAY

11 OCTOBER 25, 1996

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13 WASHINGTON, D.C.

14 The Assuring Safe Management of Nuclear Waste

15 Session was held in the Jefferson Ballroom of the

16 Washington Hilton and Towers at 1919 Connecticut Avenue,

17 Northwest at 1:00 p.m., Malcolm R. Knapp, Deputy Director,

18 NMSS, NRC, presiding.

19 PRESENT:

20 MALCOLM R. KNAPP

21 CHIP CAMERON

22 TIMOTHY C. JOHNSON

23 JAMES E. KENNEDY

24 JOHN H. AUSTIN

25 LYNNETTE HENDRICHS

1 PRESENT: (CONTINUED)

2 PAUL GENOA

3 TONY THOMPSON

4 RUTH McBURNEY

5 STEVE COLLINS

6 LYNNE FAIROBENT

7 RAY DANIELS

8 EDWARD REGNIER

9 JIM RICCIO

10 TOM HILL

11 JANE FLEMING

12 MEG LUSARDI

13 DENNIS BECHTEL

14 GREG GURICAN

15 JIM MILHOAN

16 SIDNEY CRAWFORD

17 CHRIS EINBERG

18 HENRY MORTON

19 LAWRENCE CHANDLER

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A-G-E-N-D-A

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1 P-R-O-C-E-E-D-I-N-G-S

2 (1:19 p.m.)

3 MR. CAMERON: I welcome everybody. This is
4 going to be the session on the strategic arena assuring
5 the safe management of nuclear waste. And for those of
6 you who are here for the first time, the process is very
7 simple in terms of audience participation. After the NRC
8 makes a presentation on the low level waste paper -- in
9 this case, that's the one we're starting off with -- then
10 we're going to go to the audience for comments,
11 suggestion.

12 And we've been trying to make this as
13 interactive as possible in terms of not only having a
14 dialogue with the NRC, but also having a dialogue with one
15 another on the issues. So, after we're done, if you do
16 have a point to make, raise your hand; and when you're
17 recognized, just come up to either one of the mikes and
18 I'll be out in the audience with Steve Struthers, who is
19 assisting us today, with a hand held mike to make it a
20 little easier for you.

21 And state your name and affiliation, if
22 appropriate; and we'll just take it from there. After we
23 finish one issue paper, we'll move on to the next one --
24 high level waste in this case. And I think at the end of
25 that discussion of high level waste, it will be time for a

1 break; and then we'll come back for the last paper which
2 is decommissioning on reactor facilities.
3 There is another concurrent session going on
4 in the next room on NRC fees, if any of you feel so
5 disposed to go over there. And we're going to do a short
6 wrap up at the end of the concurrent sessions today back
7 in this room.
8 Now, Mal Knapp did such a great job yesterday
9 that we've asked him to come back today and to present --
10 you're going to do all the presentations, right; and you
11 have the authors of the paper here, and they'll come up
12 and join us, and you'll introduce them.
13 Take it. Okay, Mal Knapp.
14 DEPUTY DIRECTOR KNAPP: I appreciate Chip
15 saying that I did a good job yesterday. I thought what
16 you had actually said earlier was you're going to do it
17 until you get it right.
18 MR. CAMERON: Yeah, it's 10:00 tomorrow.
19 DEPUTY DIRECTOR KNAPP: We are talking today
20 about three issue papers dealing with waste management,
21 core decommissioning. The first of these is the issue on
22 low level waste.
23 To go back in history several years, in -- I
24 believe 1994, under pressure to fit the budget reductions
25 which were then being imposed, one of the things that we

1 had to consider was that we could no longer reduce our
2 programs by trimming a little from each program. We felt
3 that we had to eliminate a program.
4 Among the programs available were high level
5 waste, low level waste, decommissioning, uranium recovery.
6 Recognizing our responsibilities in those areas; and
7 recognizing that in low level waste, in fact, the
8 applications were going into agreement states; that in
9 fact, much of our regulation was on the books, we had to
10 seriously consider eliminating the low level waste
11 program.
12 It's not that we wanted to do it and not that
13 we felt that good progress was not being made; it's simply
14 that given the alternatives, this was the one that we felt
15 would have the lowest impact on public health and safety
16 associated with waste management.
17 There are, however, a number of concerns about
18 an action like that. It's extremely dramatic, and could
19 not be accomplished in compliance with the law unless some
20 changes were made to the Low Level Waste Act and the Low
21 Level Amendments Act. So, we provided to the Commission
22 later in 1995 a study of what some of the options might be
23 in terms of the size of the low level waste program, and
24 what we would have to do to make the changes, and what
25 we'd be able to accomplish in such a program.

1 And the Commission by this time, having
2 initiated the strategic assessment process, considered
3 that it would be best to look at the low level waste
4 program from the perspective of all of the NRC programs as
5 a part of strategic assessment. Editorial, I think this
6 was a very good idea, because I think it's appropriate to
7 look at these things as a collection.
8 And we looked, I think, early on in some of
9 the earlier decisions, too parochially.
10 Given these circumstances, the Commission led
11 to the issue that you see on the viewgraph. What should
12 be the role and scope of the NRC's low level radioactive
13 waste program? And as you're probably aware, from the
14 options that were provided, we certainly considered things
15 other than reducing or eliminating the program. We also
16 included expanding it.
17 Now, the next viewgraph shows some of the key
18 factors that we have under consideration that are shown in
19 the paper. The first I've already mentioned. All of the
20 applications which are now under way are occurring in
21 agreement states such as California and Texas.
22 Now, there is interest in progress being made
23 in one or two non-agreement states, but the NRC does not
24 anticipate receipt of a low level waste application at
25 least within the next five years.

1 We also note as a factor that there is
2 resistance to siting of a variety of facilities that are
3 undesirable or considered undesirable. But this
4 resistance has made itself felt in the low level waste
5 facility siting. The fact that you're interest enough to
6 be here suggests that you are familiar with these concerns
7 and familiar with the difficulties at such sites as Ward
8 Valley in California.
9 Another factor which will affect our decisions
10 is that at the moment, unlike the situation in earlier
11 years, there are waste management and disposal options
12 available to most generators. That is, the Barnwell site
13 is open and is anticipated to remain open for the better
14 part of the next ten years.
15 And that some of the experience we have such
16 as in the state of Michigan which was denied access, I
17 believe, for five years or so; it indicates that under
18 those circumstances, generators and brokers are capable of
19 safely storing their wastes.
20 Now that's not to say that we are sanguine
21 about this. As we look at the national collection of
22 generators and brokers, occasionally we find one that gets
23 into trouble. They get into financial trouble, they get
24 into safety trouble; and something has to be done. And
25 the NRC has had to work with these folks and with other

1 individuals or other firms to help resolve the issues so
2 that the material could be stored or disposed of safely.
3 So please understand that while we believe
4 that the situation is not as critical as it might have
5 been two or three years ago, we still believe that the
6 management and disposal of waste is something -- of low
7 level waste is something which requires a lot of NRC
8 attention.
9 The last bullet is the one that led us to
10 where we are now. The program has been reduced in
11 response to government efforts to reduce the budget and to
12 streamline programs. At present, the low level waste
13 program is operating with approximately half the staff
14 that it had, I'd say, about two years ago at this time.
15 With these factors in mind, we provided a
16 variety of options to the Commission. We tried to span
17 growth, maintenance, and shrinkage of the program; as well
18 as alternative ways in which the program could operate.
19 The first: assume a greater leadership in the national
20 low level waste program.
21 I say the national low level waste program.
22 Should the NRC take lower of a view, for example, that
23 safe disposal of low level waste is an important
24 contributor to safe management of nuclear materials; and
25 therefore, we should endorse that disposal; that we

1 should, to the extent we can, encourage disposal in
2 whatever public form is available to us.
3 Our present posture is one of recognizing that
4 disposal under our regulations can be done safely and
5 making ourselves available for states and others who wish
6 to submit applications; but we have not taken a position
7 strongly encouraging the disposal of waste. Should we
8 move in that direction? And if we were to move in that
9 direction, how far should we move?
10 Would we be guilty of being involved in
11 promotion activities; which, as you know, the NRC does not
12 intend to do. Second, we could assume a strong regulatory
13 role in the national program. By and large, this would
14 mean a return to where we were a couple of years ago
15 before we began to decrease the program.
16 It would be our intent to provide technical
17 leadership, to provide technical assistance to states, to
18 continue maintenance; and as necessary, improvement of our
19 regulations, regulatory guides, and technology for
20 estimating the future impact of waste disposal.
21 The third alternative would be to retain the
22 current program which is very limited and which would
23 probably move in the direction of doing the minimum amount
24 of work required to comply with the law. The fourth
25 alternative: to recognize progress and reduce the program

1 -- would be to take the position that in fact, the Low
2 Level Waste Acts have worked.
3 Perhaps not in the way that they were
4 originally anticipated, but the fact is low level waste
5 disposal capacity is available in this country to most
6 generators. Low level sites are being developed. License
7 applications are being submitted and reviewed, and one
8 license has been granted.
9 It has not turned out the way originally
10 anticipated by Congress; but nonetheless, progress has
11 been made. Given this, perhaps the NRC should reduce the
12 program and direct it to ensuring safe operation of the
13 existing low level sites rather than direct it towards
14 supporting technologies needed to develop new sites.
15 Another alternative would be to transfer the
16 program to EPA. EPA is heavily involved, and they are
17 making good contributions to the disposal of TRU at WIPP.
18 The disposal of TRU at WIPP is not unlike disposal of low
19 level waste. Much of the technology is similar; many of
20 the problems are similar.
21 Arguably, if we wish the Federal Government to
22 become more efficient, EPA could do a good job of
23 regulating the disposal of low level waste. We would also
24 note that just as the NRC has agreement states, EPA has
25 authorized states; so they could have a similar

1 relationship.

2 The last option would be to accept assured

3 long term storage. It's been a matter of policy with the

4 NRC for quite a few years that it is technically sound;

5 that it is safe; and it is appropriate to permanently

6 dispose of waste, including low level waste.

7 But there are those that say that this is

8 politically very difficult to achieve, and that a more

9 reasonable goal would be to move in the direction of

10 assured long term storage -- storage in a way that waste

11 could be safely managed for certainly decades, if not a

12 century.

13 In the past, the NRC has not favored this

14 practice or this possibility, but we might. There are

15 arguments out there in favor of it, and the question

16 arises should be rethink that position. I would like to

17 say about the options that -- for those of you that may

18 not have heard this earlier -- these are intended to be a

19 broad set of options.

20 They're intended to reflect "out of the box"

21 thinking. I would expect that everyone here can find at

22 least one that they can disagree with. But we did want to

23 expand the way we think about low level waste management

24 and disposal to give the Commission, and to give you, an

25 opportunity to see what might all be available.

1 I'd also say that while these options are
2 drawn broadly, we are not looking at a particular option.
3 We are prepared to look at elements of options. There may
4 be aspects of one and another that you might find
5 appropriate. You may come up with a different option
6 that's not even been mentioned. And in a few minutes, I'd
7 like to hear your views in that area.
8 But first, I'll tell you what the Commission's
9 preliminary views are. They would assume a strong
10 regulatory role in the national program. That means we
11 would return our low level waste program to the size that
12 it was two years ago. The Commission also seeks your
13 comments on a couple of aspects of this -- of low level
14 waste.
15 Should it involve itself to a greater degree
16 in implementing this option to look at an integrated
17 approach to handling processing, recycle, and disposal?
18 Put another way, we have certain regulations for disposal;
19 certain regulations for storage, for handling.
20 Should we step back and look at the entire
21 suite and say if you're envisioning a process that would
22 store, perhaps minimize, or compact, handle, and dispose,
23 what is the optimal way from the perspective of protection
24 of health and safety and from an efficient and cost
25 effective waste management to do this?

1 We might want to look at these as a whole.
2 We'd like your comments on whether you think that would be
3 an effective thing to consider. And the last: how should
4 we address unauthorized disposal? Colloquially, this is
5 sometimes referred to as "midnight dumping"; a practice
6 which very rarely occurs, but can happen by those who
7 simply do not feel they have access or who do not have
8 financial ability to dispose of waste.
9 Is there anything in that area that we should
10 consider beyond that which we are doing now?
11 Those are the options and the Commission's
12 preliminary views. And now I would like to turn it over
13 to Chip. But before I do, I would -- for those of you
14 that have been here before -- at this point, Chip will
15 lead you through your comments and questions; and we'll do
16 our best to answer them.
17 And when I say "we", I want to include Jim
18 Kennedy, who is the principal author of the paper and one
19 of the best of NRC's experts in low level waste
20 regulations. I was delighted to have him serve as an
21 author, and I intend to refer every question that I can't
22 answer to him as fast as possible.
23 Chip?
24 MR. CAMERON: Thanks, Mal. That was a very
25 effective job at laying out the options and the factors.

1 Maybe we should start with factors. They seem
2 to be very critical to the options in this paper. I guess
3 I would ask as the first question: are these key factors
4 accurate? Do you think that they might change? Do they
5 support the preliminary option that's been selected?
6 For example, does anybody have any views on
7 the fact that disposal and management options are
8 available today for waste generators? I think the paper
9 did a fairly good job of laying that out. Or, the lack of
10 broadly based public acceptance for waste facilities --
11 I'm just trying to test the validity of the factors that
12 are so important to the options in this case.
13 Does anybody have any comments on factors?
14 Lynnette?
15 MS. HENDRICHS: Lynnette Hendrichs. I'm the
16 Director of Plant Support at NEI, and I have
17 responsibility for program management of low level waste.
18 I guess looking at the factors and the analysis, I don't
19 disagree with any of the facts. However, I think it
20 paints maybe a snapshot picture, and would maybe not go to
21 the broader issue of where are we going here; which I
22 think would in turn suggest maybe NRC should be taking
23 more of a leadership role.
24 For example: yes, we do have disposal today;
25 and the most optimistic projections are that, you know,

1 barring political changes in South Carolina, that will
2 continue for five to ten years. However, lead times on
3 facilities and the process of siting new facilities has
4 been problematic at best.
5 So, if we don't approach it from the
6 perspective of where are we going and actively show
7 leadership, I think five years from now or maybe even
8 sooner, we may see the error of our ways. And the -- and
9 then another thing that may be not be reflected here is
10 the fact that we currently have disposal and we have
11 reduced volumes and small volumes because we're mostly
12 looking at the perspective in terms of operational waste.
13 And the decommissioning situation has quite a
14 different perspective on that. The waste volumes are very
15 large, and the situation -- all of the dynamics of the
16 situations change, which I guess would suggest a very
17 dynamic situation here. This kind of says maybe we're
18 okay and, looking at those facts, that, you know, we don't
19 need to do too much other than respond in a regulatory
20 sense.
21 And I guess I would suggest that the dynamic
22 nature of where we need to go, and the difficulty in
23 getting there, and the different perspective -- put on the
24 problem by decommissioning waste would paint a very
25 different picture. That in fact, we do need a lot of NRC

1 leadership in this area.

2 Thank you.

3 MR. CAMERON: Thanks, Lynnette. That's

4 exactly the type of comment that's going to be helpful to

5 us.

6 Mal?

7 DEPUTY DIRECTOR KNAPP: Yes, I have a response

8 to that. First, thanks for the comment.

9 Second, as I mentioned, one of the concerns we

10 have with this leadership role is that we do not want to

11 get ourselves into an advocacy position. I don't want to

12 put you on the spot now; but in your comments either now

13 or in your written comments, any suggestions as to how we

14 can demonstrate leadership, how we can be constructive

15 without going beyond what is our appropriate agency job,

16 be happy to hear them.

17 MR. CAMERON: And Lynnette, if you want to

18 tackle that now, that's great.

19 MS. HENDRICHS: Sure. I guess I'm a little

20 perplexed about your concern over advocacy. I mean, your

21 role is public health and safety, and you've indicated in

22 the past that disposal is preferable to long term storage.

23 So, your role and taking a leadership role and doing what

24 NRC can to help site appropriate, safe disposal facilities

25 seems to me to be without conflict, unless I'm missing

1 something.

2 An example would be, to put it in particulars,

3 the Ward Valley situation where the Department of Interior

4 has inserted itself in a role that many of us question and

5 maybe saw that NRC could have played a maybe slightly

6 stronger leadership role. And I know this question of

7 what your role is was -- came up.

8 And maybe if you could help us understand your

9 concerns, we could understand where the question of too

10 much advocacy comes in on NRC's part.

11 MR. CAMERON: Okay; thanks, Lynnette.

12 I think this is a useful thread to follow in

13 terms of what other people have to say about option one

14 and would it be appropriate for the NRC to take a

15 leadership role; would it be helpful for the NRC to take a

16 leadership role.

17 Any other comments on that? Did you want to

18 say something?

19 MR. GENOA: Paul Genoa, also with the Nuclear

20 Energy Institute. And just adding one other dimension --

21 that I can see where the NRC would be concerned about

22 advocacy, for instance, of the use of radioactive

23 materials and technologies. And clearly, that is not the

24 role that we're talking about.

25 Society has already determined that it is

1 going to use radioactive materials as enjoying those
2 benefits today. What we're talking about, rather, is
3 acknowledgement that safe disposal of the byproducts of
4 that use is a safety and health question.
5 And clearly, you have that responsibility in
6 advocating that position aggressively. It appears to be
7 necessary because, you know, quite frankly, as your paper
8 points out, in the last 25 years, we've only had one
9 facility come on line to provide additional capacity, and
10 it's only a limited amount of capacity. And that's after
11 spending about $512 million dollars, you know, in trying
12 to develop new capacity.
13 So, I would just add that perspective. Thank
14 you.
15 DEPUTY DIRECTOR KNAPP: Thank you.
16 MR. CAMERON: Okay; thank you, Paul. We're
17 discussing the feasibility, the appropriateness of option
18 one, which is the NRC taking more of a leadership role in
19 assuring the disposal -- the development of disposal
20 capacity for low level waste. Keep in mind that the
21 Commission's preliminary option was option two, which is
22 assume a strong regulatory role in national low level
23 waste programs.
24 Tony Thompson.
25 MR. THOMPSON: I think if you look at waste

1 disposal perhaps in a slightly broader perspective, the
2 importance of NRC taking a leadership role comes through a
3 little more clearly. We've had a couple of papers here on
4 probablistic performance based -- or PRA and performance
5 based licensing. And if you're going to do that kind of
6 thing, you're going to be taking a lead because EPA's
7 approach to regulation is not really geared to approach
8 things in that fashion.
9 You've got states that are addressing NORM
10 disposal issues which are waste disposal issues. You've
11 got an enormous amount of information on performance
12 assessment that has been developed by your low level waste
13 people over time that is, I think, going to be -- would be
14 tremendously valuable in all this context.
15 You've discussed whether or not -- if not
16 through your hand, perhaps through Congress's hand -- that
17 you would be addressing perhaps regulation of DOE wastes.
18 In which case, you have to take -- you have to be prepared
19 to maintain an aggressive position on leadership with
20 respect to technical waste disposal issues.
21 And ground water is a very problematic issue.
22 That is one that the advisory committees have said that
23 NRC needs to take another look at in this area. It's
24 turning out in the uranium facility area to be the most
25 problematic issue of all. And so there's experience there

1 that -- I'm not sure that there's talking -- necessarily
2 as much cross pollenization *(sic)* between the -- inside
3 the NRC as there probably ought to be on these issues.
4 And finally, the whole mixed waste issue -- I
5 think NRC's position that there is no conflict between the
6 low level waste standards and the RCRA approach to
7 regulation is silly, and you ought to reevaluate that
8 position because it's standing in the way of getting rid
9 of and disposing a lot of waste.
10 In a much shorter time, rather than trying to
11 treat everything, you could put a lot of this stuff right
12 into a low level waste facility because radiation is the
13 prime hazard.
14 MR. CAMERON: Okay; thank you, Tony. Before
15 we go to Ruth McBurney, Mal or Jim, did you have any
16 comments at all?
17 MR. KENNEDY: I have one, and I'd be
18 interested in hearing particularly more about this term
19 leadership.
20 Tony, you just used the word leadership, and
21 it sounded like it had the idea of being a technical
22 leader. That is, having a strong technical staff in
23 performance assessment and so forth. And that's kind of
24 like our option two, which is to have a strong regulatory
25 role.

1 Lynnette was using leadership in the context,
2 I think, of sort of a single minded pursuit of promoting
3 disposal in the country, like testifying before Congress
4 and things like that, I think. Not in the context of
5 technical issues, but in the context of just -- as a
6 policy matter promoting disposal.
7 So, that's what I'm interested in is --
8 leadership has two different meanings, and --
9 MR. THOMPSON: Well, I guess I would say that
10 because of the technical capability that you have and that
11 the -- and the expertise that you've developed over time,
12 --
13 MR. KENNEDY: That's a form of leadership.
14 MR. THOMPSON: -- that is the basis for being
15 able to go out and be a more aggressive leader in the
16 policy sense of --
17 MR. KENNEDY: The two go together.
18 MR. THOMPSON: Yeah, I think the two go
19 together.
20 MR. KENNEDY: Okay.
21 MR. THOMPSON: I don't think you can do what
22 Lynnette is talking about if you don't have the strong --
23 MR. KENNEDY: The foundation.
24 MR. THOMPSON: Right.
25 MR. KENNEDY: And so you're advocating both?

1 MR. THOMPSON: I am; indeed.

2 MR. CAMERON: I think that's a good point is

3 maybe we're putting too fine a point on the distinction

4 between option one and option two.

5 Ruth McBurney?

6 MS. McBURNEY: Yes; the CRCPD Board of

7 Directors would support, as we mentioned yesterday, with

8 NRC maintaining oversight over Department of Energy's

9 radioactive materials. It could also justify an existence

10 of a strong program if NRC accepted regulatory

11 responsibility for DOE waste -- a low level waste.

12 And certainly the need would remain for NRC to

13 provide training, document review, oversight of developing

14 waste disposal technologies. For example, consolidation

15 with DOE and oversight of the DOE's low level radioactive

16 waste research efforts would probably save a few federal

17 dollars -- and then regulatory program review in the

18 agreement states.

19 So, NRC wouldn't have to advocate new disposal

20 capacity from a policy standpoint, but certainly take a

21 strong regulatory leadership role in these other areas.

22 MR. CAMERON: Okay; thanks, Ruth.

23 I think it's interesting that we are getting

24 some comments on the factors that lay under these options.

25 Lynnette pointed out the decommissioning waste that might

1 be coming on board. Tony and Ruth both talked about the
2 possibility of NRC assuming jurisdiction over DOE
3 facilities.
4 So, we may go back to those to test some of
5 those other factors in a minute; but how about further
6 comments on -- we've been talking about option one and
7 option two here.
8 Steve?
9 MR. COLLINS: Steve Collins from Illinois
10 Department of Nuclear Safety, but representing the
11 Organization of Agreement States. There were six states
12 that provided input to the Organization of Agreement
13 States on this particular issue that we consolidated.
14 Those six were Texas, Washington, Colorado, Illinois,
15 Tennessee, and Utah.
16 So there's a conspicuous absence of two states
17 that are key there: South Carolina and Nebraska. Those
18 two states did provide information to CRCPD, which Ruth is
19 representing to you. So, they have provided input; just
20 not through the Organization of Agreement States.
21 For option one, five of the six states were
22 opposed to NRC assuming a greater leadership role from
23 outright opposition to the belief that it is not desirable
24 that NRC, as a regulatory agency, should promote new
25 disposal capacity.

1 This should be advocated by the licensees
2 needing the capacity.
3 There is also opinion indicated -- the NRC
4 does not need to advocate disposal capacity. Waste
5 disposal demand will make such a determination.
6 One state believed that NRC should assume a
7 leadership role as a strong advocate for new disposal
8 capacity. One mechanism for doing this would be to
9 establish a strong regulatory stand regarding the storage
10 of low level waste.
11 That one particular state was Washington that
12 differed; and I'll read to you their option one comment
13 which said, "The NRC should take a leadership role at
14 sites nearing completion." So even their support was
15 qualified. "However, since the Low Level Reactor Waste
16 Policy Amendments Act objectives have basically been met,
17 they should not dedicate a lot of effort in this area."
18 I don't understand that. I can't explain it.
19 But that's what they said. Okay, strong leadership role,
20 but not a whole lot of effort. Okay.
21 I didn't say I can't, did I? I don't
22 understand it yet. I will eventually, but --
23 "The NRC should not pursue disposal at US DOE
24 facilities because such efforts may interrupt the progress
25 that has been made in development of disposal facilities."

1 That last sentence again was a State of
2 Washington comment which doesn't reflect the overall
3 position of the CRCPD or the Organization of Agreement
4 States with regard to independent oversight of the whole
5 organization and all of its uses of material.
6 Then we go into option two. Or do you want me
7 to wait?
8 MR. CAMERON: Why don't you go on to option
9 two since we've sort of been maybe -- danced between them.
10 MR. COLLINS: For option two, all of those six
11 states were opposed to NRC assuming a strong regulatory
12 role that encompassed all low level waste activities.
13 Three states questioned the need for an enhanced staff to
14 await receipt of a low level waste facility application.
15 Other states indicated the NRC should continue
16 in a variety of tasks, including topical report reviews,
17 guidance documents, report reviews, storage of low level
18 waste, training, oversight of development technologies --
19 developing technologies, and regulatory program reviews.
20 But there was no consensus on how these tasks
21 should be prioritized. Most commenting states felt that
22 states involved in the low level waste management
23 programs, including those with existing sites, were doing
24 an adequate job in protecting the environment and the
25 public.

1 One state indicated that some functions are
2 not needed now, such as further low level waste rule
3 making. Another state indicated NRC might justify the
4 existence of a strong program by accepting the regulatory
5 responsibility for DOE's low level waste.
6 MR. CAMERON: Okay; thanks, Steve. And we'll
7 be back to both you and Ruth when we get into some of the
8 other options.
9 Mal, did you have any questions or
10 clarifications on this?
11 DEPUTY DIRECTOR KNAPP: I had a couple of
12 questions. With respect to the comment about whether it
13 would be disruptive to the current developing low level
14 sites for NRC to pursue disposal of low level waste or
15 mixed waste at DOE sites, I just was curious whether there
16 are any other people here that hold views on whether that
17 would be a good or bad idea.
18 MR. CAMERON: Okay, do we have a -- Lynnette?
19 MS. HENDRICHS: Yes, I don't see that it would
20 necessarily be a bad idea without knowing more of the
21 details or, you know, better indication of how much
22 resource -- how many resources it would take. But it
23 doesn't seem -- I guess that's kind of a qualified
24 statement to necessarily be a bad idea if that oversight
25 is needed and there's some integration of the commercial

1 and DOE programs.

2 MR. CAMERON: Okay; thanks, Lynnette.

3 I believe -- do we have a -- did you have a

4 comment back there, sir, in the cardigan? No? Okay.

5 Anybody else want to respond to Mal's question

6 at this point?

7 Lynne?

8 MS. FAIROBENT: Lynne Fairobent. Mal, I'm not

9 sure I completely followed your question, but I think what

10 you're asking is whether or not DOE capacity could be

11 utilized for commercial waste if NRC takes over external

12 regulation of the DOE facilities. Is that what you're

13 after?

14 DEPUTY DIRECTOR KNAPP: Not exactly, and I may

15 ask Jim to clarify it. One question, for example, that

16 has been kicked around is disposal of mixed waste. Tony

17 Thompson mentioned a few minutes ago the concerns about

18 the mixed waste problems because of the dual regulation.

19 An alternative that has been discussed -- and I think DOE

20 has mentioned it once or twice -- is that they would

21 accept responsibility for disposal of commercial mixed

22 waste; the argument being that compared to the amount of

23 mixed waste DOE has to dispose of, commercial mixed waste

24 is not particularly large in volume.

25 That could suggest -- in fact, it might almost

1 be implicit in such a move that once you changed whatever
2 laws and regulations you might need to change to be able
3 to do that, disposal of what we might call "ordinary" low
4 level waste -- commercial low level waste at the DOE
5 facility -- could also be practical.
6 It could be doable. The real question that I
7 think we're asking is: absent NRC being given broad
8 regulation of DOE, is it a reasonable way to go to perhaps
9 ease the stress on present low level waste generators; or,
10 would it in fact be disruptive, say, to those who are
11 trying to develop sites?
12 Therefore, it would be a -- either a good or
13 bad idea, depending on your perspective; and perhaps on
14 other factors that we're not familiar with.
15 Jim, do you have anything to add to that
16 question?
17 MR. KENNEDY: That's a good answer. You know,
18 our primary interest and overriding interest is assuring
19 that there's disposal capacity for all the generators in
20 the country into the far, foreseeable future. And having
21 a DOE facility -- existing DOE low level waste facility
22 take commercial waste could be one means of attaining that
23 objective.
24 Whether we had to regulate it or not is
25 another question. I think there's some efficiency

1 arguments that would tend to say that we might be best to
2 regulate it because we have a regulatory program in place
3 and guidance documents and so forth. But they're not
4 necessarily related.
5 MS. FAIROBENT: Let me see if I can give a
6 couple of views then. First off, this particular issue
7 paper was one of the few that I saw any interrelationship
8 between the issue of NRC taking over external regulation
9 of DOE facilities and the options being discussed within
10 any specific paper, which I think personally I would have
11 liked to have seen more interrelationships on those issues
12 as the various options on each of the topics were being
13 laid out.
14 A couple of comments on the DOE processes.
15 DOE does not utilize the waste classification system per
16 se that NRC regulates under the A, B, C, greater than
17 Class C on a formal policy wide basis. Okay, so I think
18 to begin with, both NRC and DOE would have to go back in
19 and look at whether or not the disposal facilities that
20 DOE has operating and their performance assessments that
21 are currently ongoing -- whether there would be any real
22 difference, whether it was commercial waste being put in
23 or DOE generated waste.
24 Technically, I don't think it would be.
25 Perception may be a different issue. DOE also is

1 currently, right now, going through the process of
2 rewriting their waste management order. And some of these
3 same questions you're throwing out are things that they
4 are wrestling with as they develop the order rewrite.
5 But I would also flip it a little bit and say
6 that in talking with people out in the industry in a broad
7 sense, a question has also come up. Because of the fact
8 that if we look at where we've come since the advent of
9 the Low Level Waste Policy Act; and the volume of low
10 level waste being generated commercially; and the fact
11 that if, in an ideal situation, all of the compacting
12 processes -- if the politics of those processes allowed us
13 to have all of the state compacts open, I would question
14 on an economic basis whether or not we truly need all of
15 those sites based simply on commercial volumes today.
16 So the flip side of it could be maybe, in
17 fact, we ought to be putting some of the DOE low level
18 waste into these compact state sites that are being
19 proposed, being developed, versus developing new DOE
20 disposal capacity for low level waste.
21 If you take a look at the DOE waste management
22 programmatic and environmental impact statement, the final
23 of which is due to come out mid November -- but if you go
24 back in and look at the draft, there is new capacity for a
25 low level waste disposal being talked about in that.

1 I'm not so sure that it makes total sense that
2 we develop new DOE disposal capacity in light of the
3 amount of commercial capacity under way if we can overcome
4 the politics that's keeping that progress from being
5 implemented. On the other hand, maybe the quid pro quo is
6 that DOE in fact takes commercial mixed waste and we do
7 some trade off balancing.
8 You know, I just don't know that -- well, let
9 me back up. I know we're not in the same situation we
10 were when the original Low Level Waste Act was passed.
11 And politically, I don't think anybody wants to advocate
12 we reopen that process again. But on the other hand, I'm
13 not so sure as a taxpayer that it doesn't make sense that
14 we go back and look at that.
15 The economics simply are not there to support
16 13 commercial sites or 11 commercial sites today. As far
17 as capacity wise, if the three current sites stay open, I
18 think there's adequate capacity for the commercial low
19 level waste today that's being generated.
20 MR. CAMERON: Thank you. And that's a very
21 intriguing way to look at it, and I might ask Mal and Jim
22 -- when you look at it from that perspective, does that
23 change the options that would be selected in any way?
24 What are the implications for the options if you look at
25 the disposal of DOE waste in commercial facilities?

1 Obviously it's an important point, but does it
2 have an implication for the options?
3 DEPUTY DIRECTOR KNAPP: Jim may want to say
4 something; but frankly, I'd like to think about that for a
5 while. That's just not something that I had --
6 MR. CAMERON: Okay.
7 DEPUTY DIRECTOR KNAPP: -- I had considered
8 very carefully prior to this. I appreciate the concept.
9 I don't know.
10 Jim, do you have any thoughts on that?
11 MR. KENNEDY: I'm like you Mal. I can feel
12 myself sort of resisting it, and that means that's good
13 because it's a new idea and I need to think about it. I
14 think you said a lot, and it's something I hadn't thought
15 of -- or we hadn't thought of.
16 MR. CAMERON: Jim's our barometer on that.
17 Lynnette?
18 MS. HENDRICHS: Yes, this is somewhat of a
19 different question than I thought I was responding to
20 initially, which was NRC oversight of both types of
21 facilities and not necessarily the concept of sending
22 waste to their sites or theirs to ours.
23 A couple of points I'd like to make in that
24 regard is -- well, the main theme, if you will, is
25 flexibility in our thinking. Because if anything is

1 important, it's -- this is a dynamic situation, and I
2 think the more flexible and the more market forces can be
3 relied on, the better the solution ultimately; and better
4 meaning that it will fit the need and may even have some
5 efficiency in cost effectiveness in the process.
6 But in that vein, I'd like to suggest that
7 maybe there's not necessarily a need to overlay the
8 regulatory systems. I mean, we've found with mixed waste
9 that when that happens, the result is a disaster. And
10 perhaps DOE waste sites can accept commercial waste under
11 their own system. If it hasn't been proven to be broken,
12 why do we need to fix it?
13 And I guess flexibility again is the theme in
14 terms of, you know, who are we to stand back and dictate
15 that it goes one way or the other? I mean, ultimately, I
16 think our objective as a nation for DOE or commercial
17 waste is we want a few sites, we want adequate capacity.
18 We're not in a position to go back and necessarily dictate
19 the solution, but to be flexible and recognize all
20 opportunities and options when they present themselves.
21 It might be a better approach.
22 MR. CAMERON: Thanks, Lynnette.
23 MR. KENNEDY: I want to add one thing, Chip,
24 with respect to what both Lynnette and Lynne said. And
25 that is, with respect to DOE and the states, one of the

1 main reasons for having the Amendments Act in the
2 beginning and something NRC has supported all along is
3 states making a choice as to where their waste goes and
4 working it out among themselves.
5 So, I'd be particularly interested in hearing
6 from the states what they would think about DOE taking
7 commercial waste-- not just mixed waste, but commercial
8 waste in; particularly maybe in light of -- you know, I
9 think when you compare the curies that they're going to be
10 leaving on site versus the commercial site, the waste
11 streams, I think, are enormously different.
12 I mean, that would argue for going that way.
13 But --
14 MS. McBURNEY: That is a big consideration.
15 This is Ruth McBurney.
16 As I understand it, however, DOE is also
17 looking for commercial sites for their waste. We've got a
18 situation --
19 MR. THOMPSON: Yes, they're doing it.
20 MS. McBURNEY: Yeah.
21 MR. CAMERON: Yes; that's a good point too,
22 Ruth. I don't know if we want to get into an in depth
23 discussion of that.
24 Tony, do you have -- why don't you go ahead
25 and then we'll go to Steve.

1 MR. THOMPSON: Okay, I was just going to make
2 that point that there is a lot of mixed waste, for
3 example, at Hanford that, if it could be disposed of in an
4 existing low level waste facility -- it wouldn't even have
5 to go off the Hanford reservation, and they could save the
6 United States Government one hell of a lot of money if you
7 can solve this mixed waste dilemma and acknowledge that -
8 - and address what the risk is -- this gets to your sort
9 of risk based regulation.
10 And if the risk if the radionuclides involved
11 and you can work out a problem, DOE could use an existing
12 commercial waste facility right there and save a lot of
13 money.
14 MR. CAMERON: Thanks, Tony. Steve?
15 MR. COLLINS: Steve Collins attempting to
16 represent the Organization of Agreement States.
17 MR. CAMERON: You have a number of different
18 guises. Either you're a private citizen or you represent
19 them, and now you're attempting to represent them?
20 MR. COLLINS: Well, you threw a question in
21 that wasn't in your papers that you're asking.
22 MR. CAMERON: I see. You're very careful.
23 MR. COLLINS: And I haven't even had legal
24 training.
25 MR. CAMERON: No, I thought Mal probably

1 and then over to Ed Regnier.

2 MR. DANIELS: Ray Daniels, Defense Nuclear

3 Facility Safety Board staff. I'm speaking as a private

4 citizen here. But it's my understanding at Hanford there

5 is an environmental restoration disposal facility, so-

6 called ERDF, which has capability for five million cubic

7 meters which is accepting mixed waste.

8 And in fact, all of the waste that's being

9 generated in the environmental restoration side is going

10 into that facility and it started work this summer. So,

11 I'm surprised that they're looking for off-site disposal

12 for Hanford. Maybe there's some special case wastes that

13 are involved, but -- just a bit of information.

14 MR. CAMERON: And thanks for that information,

15 Ray.

16 Ed?

17 MR. REGNIER: Yes, Edward Regneir, Department

18 of Energy. I just wanted to add another note of --

19 another consideration, I guess, or perspective to throw in

20 on the acceptance of commercial waste by DOE. And that's

21 an observation that, although DOE sites are DOE sites,

22 they are located in a state.

23 There must be no one from the State of Nevada

24 here, or you would have probably heard from them in that

25 certainly I think our best, if -- or certainly one of our

1 better sites for disposal technically of low level waste
2 is at the Nevada Test Site in Nevada.
3 In many of our sites -- we'd like to send
4 waste there. However, that state is quite concerned about
5 the issues of equity and becoming the single or primary
6 centralized disposal site for all of DOE waste to the
7 point where, you know, out of respect for this opinion at
8 this time at least, there has been a moratorium on any
9 additional sources or generators of DOE waste going to
10 Nevada such that we are not now allowing, as I say, any
11 new generators of our own waste to be shipped there.
12 From that perspective, I would presume that
13 the State of Nevada would have opinions on that or
14 certainly probably want some type of consideration of a
15 quid pro quo or other benefits that would go along with
16 what they would probably view as a disadvantage of being
17 the -- even though it's a DOE facility, they're still the
18 state it's sited in, and they look at it that way.
19 MR. CAMERON: Okay; thanks, Ed. There are
20 people here who live in the State of Nevada, but they
21 don't represent the State of Nevada, and they probably
22 won't be responding to that but will be active later on in
23 the high level waste discussion. Let's go back to a
24 couple of threads that were suggested by some of the
25 Organization of Agreement State comments.

1 One of the things the Commission is interested
2 in is well, if you choose a particular option, how do you
3 implement that. What are some ways of implementing that?
4 And I think just something to keep in mind and we can go
5 back and talk to it later -- the suggestion was made in
6 the agreement state comments that one way the Commission
7 could assume a greater leadership role -- not a
8 regulatory, technical role, but a greater leadership role
9 -- would be to prohibit the storage of low level waste.
10 Is that correct, Steve? And I mean -- was
11 that the comment that was made? From the State of
12 Washington, I believe.
13 And while he's looking for that, I'd just --
14 I'm just bringing that up as a -- just think about that.
15 What does that mean to assume a greater leadership role?
16 How do you do that? And I guess another thread is -- was
17 suggested also in the agreement state comments, and I
18 think people might have comment on this, is that if you
19 assume that all those factors are correct, does that
20 justify the preliminary option, option two; which I think
21 was raised by the majority of the agreement states?
22 So why don't we look at that for a minute.
23 Lynnette?
24 MS. HENDRICHS: I'm your buddy, Chip, to help
25 you whenever you're killing time and people are looking

1 for things. I have a couple of points to make. Kind of
2 going back a little bit, NEI has developed a set of
3 principles on how we intend to navigate this landscape of
4 low level waste disposal and the dynamic nature of it and
5 the many changes.
6 And I wanted to clarify that one of our
7 primary principles is that the host state's desires should
8 be respected. In no way should the solution be
9 implemented in such a way that it would override, for
10 example, any host state that didn't wish to take certain
11 categories of waste.
12 What we are leading for, I guess, is more the
13 option that if it would permit such a state one, to go
14 ahead and build the facility -- you know, if you build it,
15 they will come -- and then in the future, if the option --
16 if it made more sense to their public than it had in the
17 past, that other waste streams could help defray costs or,
18 you know, made sense then, that that would be acceptable.
19 But in no way some of the -- I didn't want
20 some of the remarks that I had made to be misconstrued as
21 not being respectful of what the states are doing and
22 their right to not accept waste as it stands under the Low
23 Level Waste Policy Act.
24 To go to the second question of what that
25 leadership role might look like for the NRC, I think part

1 of the issue that will plague NRC or anybody else in
2 trying to take a real strong leadership role is to have a
3 better sense of what our direction is. And in that
4 regard, in order to apply these principles that we have,
5 we are interested in getting a dialogue going and coming
6 up with a plan that is -- again, doesn't dictate actions,
7 but perhaps recognizes the uncertainties and can be more
8 flexible and not necessarily radical.
9 You know, we're not necessarily talking about
10 throwing out the act and dictating a whole new solution,
11 but can in fact help us all -- all the participants have
12 more of a sense that we are going in a common direction;
13 that there are some uncertainties, but that an optimal
14 system will look to address those.
15 And of course, NRC would be a key player and
16 leader in that objective.
17 MR. CAMERON: Okay, and just before we go to
18 your colleague Paul, would that dialogue include all of
19 the affected and interested parties: not only the NRC,
20 but citizen groups, state government, local governments?
21 MS. HENDRICHS: Yes, it would to a point. I
22 mean, our first objective then -- I presume that's what
23 Paul was going to mention, is we're having a workshop in
24 Knoxville, Tennessee the 12th and 13th of November, and
25 that's just a first in a series. We don't intend to have

1 it answer all questions or come at it from all
2 perspectives, but as a way to open that dialogue.
3 We specifically solicited regulatory agencies,
4 companies developing disposal sites, and processors. We
5 have not, to this point, solicited direct participation
6 from who might -- you might consider your public interest
7 groups.
8 MR. CAMERON: Okay, but that might -- as this
9 dialogue continues, that might occur because of obvious
10 importance of having those viewpoints.
11 Yes?
12 MS. HENDRICHS: The answer is yes.
13 MR. CAMERON: All right.
14 MR. GENOA: Yes, Paul Genoa again. And I just
15 wanted to get back to one of your key factors, slightly
16 different. But you asked how could the NRC be an
17 advocate, for instance, or play more a leadership role.
18 One of the key factors acknowledges the lack of broadly
19 based public acceptance and the fact that that has
20 significantly affected the development or slowed the
21 development.
22 I think one role, leadership role, is to stand
23 up for the health and safety implications of the existing
24 regulations to essentially -- to make it very clear to the
25 public in a convincing way, in a public way, and out front

1 that in fact the rules as they exist are protective.

2 And the public does not -- is not sure of

3 that. They hear many different stories and they believe

4 those stories. And there is not confidence that low level

5 waste can be managed safety in this country. And in fact,

6 if you believe it can, that that view needs to be put

7 forward.

8 And that would be an example, I believe, of a

9 very supportive and helpful role.

10 MR. CAMERON: Okay; thanks, Paul. There's

11 another specific example of how the NRC might implement

12 option one if the Commission chose to do that.

13 Mal?

14 DEPUTY DIRECTOR KNAPP: Thank you. I would

15 like to throw out a question to follow up on that. I

16 think we do have some folks here that may represent

17 citizens' groups or may be able to speak informally, even

18 though they may not represent them, but who have the

19 concerns that citizens' groups have.

20 Any thoughts that they might have on Paul's

21 suggestion, sometime, as we continue this discussion,

22 would be gratefully appreciated.

23 MR. CAMERON: Okay; thanks, Mal. Steve and

24 Ruth -- are they still here?

25 MR. COLLINS: Yes.

1 MR. CAMERON: Good.

2 MR. COLLINS: Steve Collins --

3 MR. CAMERON: Did you find us --

4 MR. COLLINS: -- from the Organization of

5 Agreement States. What we said was out of the six states

6 that comment, five strongly opposed a greater leadership

7 role. The one that did favor a stronger leadership role

8 was the state of Tennessee.

9 And their comment is "Tennessee believes that

10 the NRC should assume a leadership role as a strong

11 advocate for new disposal capacity, option one. One

12 mechanism for doing this is to establish a strong

13 regulatory stand regarding the storage of low level waste,

14 option two.

15 "And this requires the NRC to totally abandon

16 its promotion role and become a full fledged waste and

17 control regulator that allows the use of radioactive

18 material provided to public workers, patients, and the

19 environment are adequately protected. It is not the

20 regulator's role to promote any use of radioactive

21 material.

22 "The acceptance of this concept will help with

23 the perception the public has of NRC. The requirement

24 that a licensee will not be allowed to store waste beyond

25 a certain period without shutting down and a moratorium on

1 new licenses in areas where there is no disposal capacity
2 could force the issue.
3 "Another approach is to require significant
4 financial assurances on accumulating waste," and that
5 should probably be done anyway, "a recognition that most
6 of the states have gone beyond shallow land burial to
7 enhanced technology for disposal of low level waste could
8 lead to a greater acceptance of the assured storage
9 concept, option six."
10 MR. CAMERON: Okay, that's an interesting
11 suggestion, not only that -- I think the implication is
12 that -- forget about assuming a greater leadership role.
13 That remark from Tennessee implies that we're doing
14 something counterproductive in terms of a long term
15 disposal strategy.
16 How about the comment on the fact that the
17 factors don't support the choice of option two? In other
18 words, if all of those factors are true -- now forgetting
19 for the moment Tony and Lynnette's points about -- and
20 Ruth's about DOE and decommissioning waste. If those
21 factors are true, why does that support taking a stronger
22 regulatory role rather than just maintaining the status
23 quo?
24 I believe that was another comment from one of
25 the states; is that correct, Steve?

1 MR. COLLINS: It wasn't from the state that I
2 work in, so I don't remember it.
3 MR. CAMERON: Okay. Anybody have any comments
4 generally on the connection between the factors and the
5 Commission's choice of -- preliminary choice of option
6 two?
7 Okay, now -- Paul, did you have -- do you have
8 something to say on that?
9 MR. GENOA: I don't want to dominate the
10 discussion here this morning.
11 MR. CAMERON: Well, no one else is speaking at
12 the moment; so if you want to say something, feel free.
13 MR. GENOA: The point -- it had to do with the
14 factors and essentially the assumptions on the
15 internal/external issues. Now, whether they were valid
16 and accurate and whether the options would support
17 resolution -- and some of the issues that need to be
18 addressed -- I have to go back and say the concept of a
19 snapshot is probably a good way to look at it.
20 That I think an important consideration that
21 was not fully developed is the sort of dynamic, yet
22 tenuous, status of the existing waste treatment and
23 disposal capacity. I don't think it envisioned that a
24 very simple, unilateral decision like changing the rate
25 structure at Barnwell from volume based to curie based

1 would completely turn the entire waste management and
2 waste processing arena upside down overnight.
3 You know, it's totally going to change the way
4 the waste is processed after November 1st. I don't think
5 that was fully explored, the fact that Barnwell's
6 operation is totally dependant on the support of general
7 assembly and governor, and that that needs to be
8 essentially reestablished annually.
9 It is extremely tenuous and a very dynamic
10 situation. The collapse -- it's sort of a house of cards.
11 Any one card falling could collapse the entire system.
12 And so we could give more thought to that. The discussion
13 of decommissioning waste is one element, but the issue of
14 electric utility restructuring is going to put dynamic
15 forces in place on the competitive nature of nuclear power
16 in this country.
17 And after all, nuclear power does produce
18 large volumes of the waste, and decommissioning wastes are
19 very large. If they are shifted ahead or behind in time,
20 the rate of generation changes dramatically. Some of the
21 disposal facilities are only planned for 20 year periods.
22 And you know, decommissioning waste coming ten years
23 sooner or ten years later could totally change the
24 operational and financial dynamics and viability of those
25 disposal sites.

1 So, some real thought needs to be given into
2 how that plays. I think an issue that's very important
3 and difficult to grapple with is the issue such as de
4 minimis levels of radioactivity, clean up standards,
5 beneficial recycle clean up issues. Those things, if
6 factored into the discussion can have, again, profound
7 influence on the volumes and amount of waste that needs to
8 be disposed of -- huge amounts.
9 Just simple decisions on your part on what
10 clean up standards might be or might not be. Those things
11 would be, you know, useful to explore. And there's some
12 others; and of course, we're going to provide those to you
13 in detail.
14 MR. CAMERON: Thanks for giving me the mike
15 back, Lynnette. And thanks, Paul. Those are very
16 constructive points.
17 Mal, do you have a question or response?
18 DEPUTY DIRECTOR KNAPP: I do have one
19 question. If you can elaborate today, I would like to
20 hear it -- and in any case, in your final comments -- your
21 concern about the impact of rate structure. Could you
22 just walk through that one more time or the deregulation?
23 I'm not sure I quite followed your views on what that
24 linkage might be and how it might affect --
25 MR. GENOA: I'm sorry, there are two different

1 issues. The first, the rate structure in Barnwell.

2 DEPUTY DIRECTOR KNAPP: No, I'm sorry; I mean

3 the rate structure for utilities in general, the

4 deregulation.

5 MR. GENOA: Okay. Deregulation of electric

6 utilities will put significant financial pressure on

7 utilities and competition and so forth, depending on the

8 rules of the game. We acknowledge that in a perfect

9 situation, it wouldn't have any impact: everything would

10 happily continue.

11 But the rules of the game may not be totally

12 equitable. And there may be an economic disadvantage

13 placed on the nuclear utility industry. That's possible.

14 If that were to occur, you could expect decommissionings

15 earlier than you would have anticipated. You could also

16 expect that life -- or that license renewal will not --

17 may not occur as was anticipated.

18 So instead of plants decommissioning 15 or 20

19 years or a life extension for 30 or 40 years longer; in

20 fact, they may be making decisions today to decommission.

21 And I think we've seen some announcements recently that

22 would verify that.

23 DEPUTY DIRECTOR KNAPP: Thanks for the

24 expansion.

25 MR. CAMERON: Thank you. We do have to --

1 MR. COLLINS: Chip?

2 MR. CAMERON: -- in a few moments move on.

3 And let me provide a segue for you hopefully, because I

4 think you have more comments on some options.

5 Clare, could we see the options again?

6 Okay, I just wanted to make sure that if we --

7 people had comments on any of these options, that we go to

8 them. And some of the outliers here are transfer the

9 program to EPA, perhaps accept assured long term storage.

10 One of the arguments that the assured storage advocates

11 make is that assured storage would be more acceptable to

12 the public than disposal.

13 And I guess I'd just be looking for anybody

14 who wants to comment on either of these two options.

15 And Steve, did you have some more comments on

16 the options for us?

17 MR. COLLINS: Steve Collins, Organization of

18 Agreement States. Yes, Lynnette bought me enough time to

19 finally think through this earlier question, and then I'll

20 go that one.

21 The factors, I think, were pretty much right

22 on target and accurate for a snapshot. One exception that

23 might -- could have been added with regard to low level

24 waste was that there is no real disposal or management

25 option that is acceptable to us for americium or americium

1 beryllium.

2 That needs to be worked out much better so we

3 don't have to go through this process of getting it to a

4 DOE facility that we currently have to declare an

5 emergency practically to get it done. But with that in

6 mind, all of the states that were commenting being against

7 the NRC taking a stronger regulator or regulatory role was

8 basically because anything that you do stronger there gets

9 back into that concept of -- perception of you're changing

10 the rules in the middle of the game or something like

11 that.

12 And while technically that might not be a

13 problem, it just has too much potential to stop the

14 progress that's being made in any one or all of the

15 states.

16 Do you want me to go to other options now?

17 MR. CAMERON: Yes, why don't you. Why don't

18 you go through --

19 MR. COLLINS: And you skipped three and four

20 and went to five and six, did you not?

21 MR. CAMERON: We're at that point, I think,

22 where we need to sort of sum up and go on to high level

23 waste. So, if you could -- if you could run through those

24 comments for us, and I think Tom might want to say

25 something. And let's get some last comments. Jim Riccio

1 will get in there. So, let's -- you know, let's go
2 through this.
3 Why don't you two guys finish up, and then
4 we'll go over to Jim Riccio.
5 MR. COLLINS: Okay, we've been through option
6 one and two fairly thoroughly. For option three, retain
7 the current program, the states were "somewhat split
8 between options three and four being the appropriate role
9 for the national low level waste program. States tended
10 to believe that this role was more appropriate than
11 options one and two.
12 "This option indicated that NRC would do
13 activities that were legislatively required or
14 significantly contribute to the national low level waste
15 program." That was a quote.
16 "However, some states felt that the NRC had
17 gone beyond this mandate such as in the development of a
18 branch technical position on performance assessment.
19 Another argument for having some level of program was to
20 ensure national consistency in the low level waste
21 program."
22 That's all for option three.
23 MR. CAMERON: Okay; yes, I think just go
24 through them. And you know, these comments are coming
25 into the NRC obviously, so that we're going to see them

1 and everybody out there is going to see them if they want
2 to tune into the Internet. But I think it's valuable for
3 all the participants to hear what the states' view in this
4 case is.
5 So, go ahead, Steve. Is this going to take --
6 MR. COLLINS: Five more minutes at most.
7 MR. CAMERON: Okay, go ahead.
8 MR. COLLINS: Option four: recognize progress
9 and reduce the program. Two of the six states indicated
10 that NRC should declare a victory and reduce the program.
11 This was the preferred option of one state. This is based
12 on the progress that has been made in siting new
13 facilities in states where sites appear to be adequately
14 protecting the public.
15 Two states with low level waste sites had
16 mixed views relating to the reduction of the program.
17 There were questions relating to how much of the program
18 would be reduced. One state indicated it could survive
19 even if the national low level waste program was
20 completely eliminated.
21 For option five, transferring low level waste
22 program to EPA, four states are -- of the six are strongly
23 opposed to any transfer of the low level waste program to
24 EPA. The recommendations range from strongly against to
25 not acceptable for many reasons.

1 Some of these include the disruption to state
2 programs and siting efforts; the diminution of expertise
3 in the originating agency; the lack of depth and support
4 in the receiving agency; and the shifting of the financial
5 burden from one agency to another.
6 For option six, accept assured long term
7 storage: four states are strongly opposed to the storage
8 concept. One state's very critical and suspect of the
9 option. Two states point to the failure of the high level
10 waste program to sell assured storage with the monitored
11 retrievable storage program.
12 Another state indicates that it does nothing
13 but delay the inevitable use of disposal. Two states
14 recognize that there may be some merit in assured long
15 term storage. However, one state recognizes some of the
16 barriers that need to be overcome such as the public
17 distrust of NRC regulation reactor materials, and the need
18 for financial assurance for storage facilities.
19 Further, the states suggest that limited
20 licenses or moratoriums on new licenses for storage could
21 force the issue. The states' comments on discussion and
22 subsumed issues -- I'll skip those. The conclusions --
23 there's four one sentence conclusions after boiling all
24 this down.
25 The majority of commenting agreement states

1 opposed options one and two, whereby NRC takes a stronger
2 role in siting and regulatory functions. A majority of
3 the commenting states believe a national low level waste
4 program rests somewhere in options three and four.
5 And this is consistent with the results
6 obtained through public comment associated with SECY-95-
7 201. A majority of commenting states believe that
8 transfer of the program to EPA is not a viable option.
9 And a majority of the commenting states believe that
10 assured long term storage is not the answer in helping to
11 resolve the low level waste problem.
12 MR. CAMERON: Okay, we're going to go to Tom
13 Hill quickly and then to Jim Riccio from public citizen,
14 and then I think we're going to zoom into high level
15 waste.
16 Go ahead, Tom.
17 MR. HILL: Tom Hill representing the CRCPD
18 Board of Directors. All regulatory programs dealing with
19 radiative material should remain in one federal agency.
20 Consistency in approach and standards would be best served
21 by keeping a strong, central, and complete program.
22 Moving the low level waste program to EPA or another
23 agency should not be an option considered by NRC.
24 It would probably result in the loss of
25 expertise in the originating agency and the new low level

1 waste program which would lack depth and support in the
2 receiving agency. The NRC has not considered the
3 consequences and the havoc this would create for the
4 agreement states who do have low level waste
5 responsibility and have, over the years, worked diligently
6 to assure the safe disposal of this waste.
7 Safe disposal, rather than the acceptance of
8 long term storage as described in option six, should
9 receive greatest consideration. It would seem that the
10 acceptance of long term storage for low level waste would
11 do nothing -- let me go back and reread that. I don't
12 think that's coming out -- I think I left a word out.
13 Safe disposal rather than the acceptance of
14 long term storage, as described in option six, should
15 receive greatest attention -- safe disposal. It would
16 seem that the acceptance of long term storage for low
17 level waste would do nothing for the current long term
18 storage versus disposal debate, except to delay the
19 inevitable use of disposal for low level waste.
20 The CRCPD Board of Directors supports option
21 four. We recognize progress and reduce the program as the
22 option of choice. This option would formerly recognize
23 the work toward fulfilling the objectives of the
24 Low Level Radioactive Waste Policy Limits Act and the
25 progress toward development of new facilities in several

1 states.

2 This would allow the NRC to use its limited

3 resources in appropriate areas of the agency and terminate

4 the expenditure of unnecessary activities in the low level

5 waste program.

6 MR. CAMERON: Okay thank you very much, Tom.

7 And I think we'd just like to thank the states generally

8 for all the comment they've given us on a lot of the

9 issues. They've put a lot of work into it.

10 Jim?

11 MR. RICCIO: I just wanted to link up this

12 paper with the decommissioning paper and point out that --

13 MR. CAMERON: Good.

14 MR. RICCIO: -- the Office of Technology

15 Assessment several years ago put out a study showing the

16 different decommissioning options and the results on the

17 low level waste program. And it seems to be running

18 counter to where the industry is headed with this rapid

19 decommissioning. But they did note that if you use the

20 safe store option, you would significantly reduce the low

21 level waste burden that this industry's going to have to

22 bear.

23 And I think you should take a look at that

24 report.

25 MR. CAMERON: Okay, that's something to think

about in terms of the impact of decommissioning wastes and -- Jane, a short comment?

MS. FLEMING: Yeah, just one real quick comment. I just, as a member of the public, would like to support the position that was entered by Lynne and just state that I'd like to see you expand your options to at least include a look into the possibility of using DOE facilities.

Economically, I think it's the most sensible way to go. Environmentally, the sites are already there. It makes sense to use them.

Thank you.

MR. CAMERON: Okay; thanks, Jane.

And Mal, would you like to do the overview of high level waste?

DEPUTY DIRECTOR KNAPP: Certainly. The change of quotes that you see up here -- we have here John Austin and Meg Lusardi, who are the co-authors of the paper. The slide only mentions John, so I think what we'll do is we'll put it John with any of the errors in the paper, and we'll put it Meg with any of the successes.

The issue is: in recognition of current uncertainties, how should NRC approach the present high level waste situation? The current uncertainties are many, but certainly two that were foremost in our minds

1 have been the legislation that has been offered in the
2 previous Congress and that may well be offered in the next
3 Congress which would change the program, which would
4 change the standards, which would change the emphasis
5 between storage and disposal of high level waste; as well
6 as the uncertainties introduced by congressional action to
7 reduce the DOE budget and the NRC budget.
8 Frankly, at this point, I'm certainly not
9 prepared to guess what will happen. I'm not prepared to
10 guess what the next Congress will look like, let alone
11 what actions the next Congress may take. So, I think we
12 are faced with dealing with the future for waste
13 management -- high level waste management in the NRC and I
14 suspect in DOE where we don't quite know what our
15 direction's likely to be, and we're going to have to do it
16 with reduced funding.
17 I'd like to move on to some of the key
18 factors. These are some key factors that DOE raised some
19 years ago. And I noted the other day that although
20 they're several years old, I think for the most part they
21 are key factors today which is a comment of some sort on
22 the difficulty progress has in this particular area.
23 Lack of consensus among the scientific and
24 technical community and the major interest and affected
25 parties on fundamental elements of the program. That's a

1 lengthy way of saying that folks don't agree on a variety
2 of the aspects of the Yucca Mountain site as to what some
3 of the technical conclusions are at this point, as to its
4 safety, or whether in fact conclusions can even be drawn
5 at this point.
6 The second concern is the unprecedented nature
7 of geologic disposal, the difficulty of predicting the
8 performance of a high level waste repository for hundreds
9 to thousands to -- depending on whose advice you get --
10 hundreds of thousands of years into the future.
11 The problem in existing law, which may change,
12 on the linkage between siting and construction of a
13 monitored retrieval storage facility or central interim
14 storage, if you like, and the licensing and construction
15 of a repository.
16 The next concern which was raised in the low
17 level area as well was the strong public resistance to
18 waste management and other undesirable facilities. And
19 last, general -- indicates that DOE programmatic and
20 budget constraints -- I will try to speak for DOE on
21 behalf of the budget and direction difficulties they've
22 had over the years, but they have had them, and those have
23 had a ripple effect on the NRC since they will be, should
24 a license application be submitted, our only applicant and
25 our only licensee.

1 With these factors in mind, we provided a
2 variety of options to the Commission. If you have not had
3 a chance to look over the paper, please note that although
4 we have only shown five options here, each of the options
5 have some alternatives or some ways they could be
6 implemented that expands this set a bit.
7 First, we could approach Congress and the
8 administration to refocus the national program. In some
9 ways, this is not unlike the option we spoke to a few
10 minutes ago on low level waste where we would take a
11 larger role in management and disposal of waste.
12 If we were to approach Congress in such a way,
13 there's a variety of things we could suggest. Among them,
14 that perhaps Congress should make this decision. That the
15 decision on whether or not a high level waste facility
16 should be licensed in Nevada may be so difficult and so
17 politically important in this country that perhaps the
18 decision would be best vested in Congress rather than the
19 NRC.
20 There are a variety of other suggestions that
21 appear in the paper. Another alternative would be to
22 reduce uncertainty by modifying the NRC's program. For
23 example, as I said a moment ago, there are a large number
24 of unresolved issues about the site. In some of these,
25 progress has definitely been made.

1 Perhaps we are at a time when we can resolve
2 these through a stipulation process or a rule making
3 process. And if we get into details on that, I'm going to
4 have to ask Larry Chandler to say a few words about it.
5 I'm not sure whether they'll be pro or con. But in any
6 case, the idea of attempting to resolve some of the issues
7 now prior to when they might appear in a licensing arena
8 early in the next century.
9 Another alternative: because a number of
10 people believe that NRC has asked a great many questions
11 that are difficult to resolve, could be the creation of an
12 NRC internal review group to ensure that the technical
13 issues that we raise with DOE are entirely in focus.
14 The third alternative would be to maintain our
15 existing high level waste repository program. Now
16 candidly, you have to recognize that this is kind of a
17 moving target. Our budget has decreased by approximately
18 50% over the last several years, and so we will not at
19 this time be maintaining the program that we had, say, in
20 1993 or 1994.
21 But we would continue within the resources
22 that we have to maintain the program with its present
23 direction.
24 The fourth option is interesting: take a
25 minimal approach to our high level waste repository

1 program. We've been looking at this thing now -- I've
2 been with the agency working on high level waste at least
3 a fraction of that time for over 17 years. By and large,
4 new standards from EPA were going to come out any year.
5 EPA was going -- I mean, DOE was going to
6 submit an application within a couple of years. And that
7 was the view we had in 1979, and that's the view
8 apparently we will have in 1997. There is at least a
9 suggestion that until more visible progress and commitment
10 is made, that the NRC's resources to protect health and
11 safety, our overall mission as an agency, might be better
12 spent in other areas.
13 And that we should consider a position that,
14 when progress is made, we will be happy to bring staff on
15 board and tune up; and until then, we will maintain a
16 watch on what happens.
17 The last option, which overlays some of the
18 others, is to take a position on the storage of spent
19 fuel. If you're aware of the DOE obligation which the
20 courts upheld this year that they must take responsibility
21 and whose responsibility -- as opposed to title and
22 possession, because I'm not quite clear exactly where
23 title and possession lies -- but they have to take
24 responsibility for spent fuel January 31, 1998 which is
25 now about 15 months away.

1 How they will do that, where we will head
2 toward a centralized storage facility, or whether waste
3 will be stored for the rest of this century and part of
4 the next at reactor sites is an issue that perhaps the NRC
5 should take a position on and try to provide some
6 leadership to the nation on what works best.
7 Those are the options that we had provided to
8 the Commission. And the Commission's preliminary view is
9 that they would like to maintain our existing program in
10 option three. But they would like to explore taking a
11 more active role in resolving some of the issues that I've
12 just described -- again, consistent with our mission.
13 And the Commission, as in a number of other
14 areas, particularly seeks comment on what additional
15 activities we might reasonably take.
16 With that set of factors, options, and
17 preliminary views, I would now again like to turn it over
18 to Chip to hear your comments.
19 MR. CAMERON: Okay; thanks, Mal. Why don't we
20 take a look at the factors again and then start there, at
21 any rate, and see if anybody has some comments on these
22 factors according to DOE. Any comments on the lack of
23 consensus among the scientific and technical community?
24 Does everybody think that that's a true
25 statement? I don't want to necessarily go through and do

1 a true and false, but if there's a factor up there that
2 you think doesn't ring true that might have an implication
3 for the Commission's selection of options, it would be
4 important for us to be able to hear that.
5 Anybody have a statement on the factors?
6 Okay, well let's go to the options.
7 Oh; go ahead, Jim.
8 MR. RICCIO: So long as this agency and DOE
9 are gearing towards trying to dispose of high level
10 radioactive waste, you're going to meet with massive
11 opposition. And the rationale behind that is that we
12 don't see how you can dispose of something that you can't
13 keep out of the biosphere for its hazardous life.
14 And so, as long as you keep on going down this
15 track of where it's going to basically open up a hole at
16 Yucca Mountain and throw this stuff in, you're going to
17 meet with opposition. Monitored retrieval in perpetuity:
18 that's basically where the public is coming at is from
19 this point.
20 And it's interesting to note that there's
21 accepted assured long term storage in the low level
22 section, but not really a mention of it in the high level
23 section.
24 MR. CAMERON: But is that -- I though that
25 your statement was leading to the fact that this last --

1 and this is a good point. Is this last option that we
2 have -- take a position on the storage of spent fuel,
3 would that match up with -- was that compatible, analogous
4 to the last option in the low level waste paper?
5 MR. RICCIO: I think -- and taking a position
6 would be nice, but --
7 MR. CAMERON: I'm asking -- for your benefit,
8 for all of our benefit, I guess I'm asking that question.
9 And then, depending on the answer, I would go back to you,
10 Jim, to see if your understanding of the factors would
11 lead you to an option of long term monitored storage
12 rather than disposal. Is that correct?
13 MR. RICCIO: I think that's where the public
14 is at this point on high level waste, although Jane, I
15 think, wants to speak for the public as well.
16 MR. CAMERON: Okay, but let me get a
17 clarification from Mal or John or Meg on that.
18 MR. AUSTIN: Yes, option five I think is
19 compatible with your suggestion. In the past, the
20 Commission has tended to urge ultimate disposition of the
21 disposal of the spent fuel. This would be a shift in that
22 direction.
23 MS. FLEMING: And another voice of the public
24 that doesn't agree with Public Citizen's voice is I am --
25 and I know there are others of me out there -- all in

1 favor with the NRC getting involved, pushing this forward;
2 DOE pushing this forward; find a solution; find a site.
3 Many members of the public are in favor of storage.
4 I am personally very much against long term
5 site storage. I do not want to see 60, 70-odd high level
6 waste dumps spread across this country. I think
7 economically it's going to be very expensive to run.
8 Security wise, it is very dangerous. Environmentally, it
9 is not a good idea.
10 And this member of the public is all for find
11 a solution.
12 MR. RICCIO: If I could just clarify, I didn't
13 say to leave it at the site. I said you're going to have
14 to watch this waste in perpetuity.
15 MS. FLEMING: No matter where it is?
16 MR. RICCIO: No matter where it is.
17 MS. FLEMING: Even in a hole in the ground?
18 MR. RICCIO: Well, we already have seen that.
19 Basically keeping this stuff at the reactor site is posing
20 problems like with the drain down of Dresden One in that
21 spent fuel pool. Obviously, keeping this stuff at the
22 site is a problem with the problem you've already had of
23 basically the hydrogen explosion in the dry cask -- dry
24 cask disposal is a problem.
25 I'm not saying that we have a solution. We

1 are saying we have some opinions as to what is not a good
2 idea. And shoving it in the ground and trying to forget
3 about it isn't going to work. At least not in any public
4 manner. You're not going to get any public acceptance so
5 long as you fail to recognize this stuff cannot be
6 disposed of.
7 DEPUTY DIRECTOR KNAPP: Could I pursue that
8 for just a second?
9 MR. CAMERON: Yes; go ahead, Mal.
10 DEPUTY DIRECTOR KNAPP: One of the comments we
11 got earlier is that in some areas, there's perhaps not
12 been enough interaction between the various issue papers.
13 I think what I just heard is all right, we're talking
14 about spent fuel or high level waste; at least there is an
15 element that says we've got to watch this stuff, you can't
16 dispose of it.
17 Let's shift back for just a moment to low
18 level and that assured long term storage option. Would
19 you have any comment on whether there should be some
20 consistency in this philosophy; or for whatever reason,
21 you do not hold that assured long term storage of low
22 level would be appropriate -- any comment on the
23 relationship between those two areas?
24 MR. RICCIO: I would think that long term
25 assured storage of low level would be wise too in light of

1 the fact that every dump that you've built is leaking.
2 So, I think that would be a viable option for low level
3 waste as well. Although, again, it would run counter to
4 the interest of this industry.
5 MR. CAMERON: Okay, and that's a comment that
6 we might want to go on to explore later on.
7 I think we have Dennis Bechtel from Clark
8 County. Go ahead, Dennis.
9 MR. BECHTEL: For the record, Dennis Bechtel,
10 Clark County, Nevada. You made a couple of comments about
11 the factors. As the conversation on the options goes
12 forward, I can speak to that maybe a little bit later. I
13 would not limit the factors to just DOE factors.
14 There's a lot of other factors that are kind
15 of unstated on your sheet there; one of which is just the
16 fact that geologic disposal is a national policy now. And
17 we seem to be talking about, you know, proposed
18 legislation and interim storage legislation. And as of
19 right now, the policy is permanent storage of material.
20 And so, I think that needs to be emphasized
21 more.
22 There are other issues. A large issue is just
23 the transportation of the waste. You so note in your
24 background that the public is probably the -- more of the
25 public is going to be exposed by waste transport than the

1 publics that are actually around the reactors. And once
2 the -- if an interim storage site is selected, it's going
3 to be interesting to see just how this plays out
4 nationally, just the transfer of the waste, because
5 rightly or wrongly people are fearful of things
6 radioactive.
7 And I know the industry has had a safe record
8 in transporting materials, radioactive materials, but
9 you're talking about larger volumes of materials and
10 there's going to be accidents. How the public is going to
11 consider that is going to be I think a bigger issue than
12 people have discussed heretofore.
13 Also, another factor that could be added to
14 your list there is the fact that the NRC has recognized
15 that waste can be stored safely at reactor sites. In
16 fact, in some ways, dry cask storage is safer than in pool
17 storage. I mean, it's a passive system.
18 Because of the technical uncertainty of the
19 Yucca Mountain site, and the transportation issues I just
20 mentioned, I think we feel that it's probably better
21 national policy to leave the spent fuel at the commercial
22 reactors. And I think that's also -- I mean, the fact
23 that waste can be safely stored at reactor sites, I think
24 that's a key factor that should be I think added to your
25 list.

1 That's all I had.

2 MR. CAMERON: Okay. Thank you, Dennis. And I

3 guess based on your last statement, what option would that

4 support? What implications would that have for the

5 options?

6 MR. BECHTEL: I think there is several options

7 that you mentioned that I think we could support. I think

8 option 1 -- let me see here. You know, just indicating --

9 well, taking a stronger stand I guess that waste can be

10 kept on site safely, I think that's something that -- I

11 believe -- I mean, I live in Nevada and obviously I have a

12 bias, but I think as far as national policy, I think that

13 seems to make sense.

14 And I feel that with regard to option 5, the

15 NRC I think needs to take a stronger stand on that. I

16 think also the NRC -- we have been kind of going through

17 this dance with DOE, just on this viability assessment

18 over the last year or two, and it's a little uncertain in

19 my mind. They need to have -- as I understand it, they

20 have collected pretty much all of the data that they're

21 going to collect for their viability assessment

22 determination in 1998.

23 And having been involved in this for a number

24 of years, I do not feel that they have really gathered

25 enough information really to even make a viability

1 assessment. As they're tunneling in the Mountain, a
2 number of things have come up. They have a chlorine-36
3 issue. They have run into other faulting zones.
4 And I really think that says to me that they
5 really need more data, and it's a little uncertain in my
6 mind, once they get to this 1998 date, the viability
7 assessment, what is NRC going to do at that point to kind
8 of -- during the licensing phase, you know, to require the
9 Department of Energy to collect more information, I mean
10 to actually prove that the site is suitable?
11 MR. CAMERON: I think that question is one of
12 the fundamental questions that we need to address in
13 deciding on these options and going and deciding on a
14 strategic direction.
15 MR. BECHTEL: So I think with that in mind, I
16 think we would support, and I would hope the public would
17 support, a stronger role by NRC -- being the oversight,
18 the watch dog agency -- to ensure that the site is
19 suitable and --
20 MR. CAMERON: So that might lead you to one of
21 the other options, although you were saying that option --
22 this last option on storage of spent fuel would also --
23 MR. BECHTEL: Yeah, right.
24 MR. CAMERON: -- be important. And in that
25 sense I think you and Jim Riccio agree on the option, but

1 your storage mechanisms would differ.

2 MR. BECHTEL: Yeah.

3 MR. CAMERON: Jim would be off site,

4 monitored, retrievable, and you feel that the on-site dry

5 cask storage is --

6 MR. BECHTEL: Right.

7 MR. CAMERON: -- suitable.

8 MR. BECHTEL: Yeah, and I --

9 MR. CAMERON: Okay.

10 MR. BECHTEL: -- I see there is bits and

11 pieces of alternatives I think that NRR finds acceptable.

12 MR. CAMERON: Okay. Thank you, Dennis. I

13 think we're going to hear some other viewpoints now.

14 MR. GURICAN: Greg Gurican again, Patriot.

15 I have a couple of comments. I'd like to go

16 back to the key factors for a second. I guess the slide

17 itself right from the start having the parenthetical

18 statement speaks to the question of NRC's leadership in

19 this area to begin with. Why do we not see a slide that

20 says "key factors according to the NRC"? And I'd like to

21 know what your key factors are that you are considering.

22 Chip wrote up the question of truth and

23 reality here with regard to these key factors. And I

24 think if we look at factor number 1. I'm not sure of the

25 intent that DOE has in making this particular statement.

1 However, I don't believe it.

2 I believe that there is a significant amount

3 of consensus in the industry, especially in the scientific

4 community and amongst various parties who are interested

5 in the program, whether or not they're interested in the

6 (quote) "fundamental elements of the program," and whether

7 or not those elements are specific or within its entirety

8 with respect to a given program versus a different

9 program. I don't think that has been addressed.

10 So if someone were to define what the program

11 is and/or define what the fundamental elements were, then

12 we could possibly discuss what it is that they may intend

13 by that particular statement. But I think if you look at

14 the issue, for instance, that was brought up and widely

15 publicized in the news not long ago that there could be a

16 potential explosion if you will of the spent fuel in Yucca

17 Mountain once it was placed there, I think that has been

18 significantly discredited by the scientific community, and

19 we see that there is consensus at least in that area.

20 Okay?

21 Maybe you have two scientists out there who

22 don't agree, but you have a consensus of the majority of

23 people who are in the scientific community and the

24 technical community who would say that it is a possible or

25 a viable option in a safe location perhaps.

1 So given that, I'd like to know what NRC's key
2 factors are and if they differ with DOE's, and then where
3 you might go with regard to the options once I hear those
4 key factors. But I would advocate a stronger leadership
5 role for the NRC, and if anyone has any question as to the
6 definition of "leadership" let's go to the word "to lead"
7 and let's go a la Steven R. Covey, "Seven Habits of Highly
8 Effective People," who would say that to be a leader is to
9 have a vision, to promote that vision, and then you will
10 have others who will follow.
11 Thank you.
12 MR. CAMERON: Thank you very much, and I guess
13 I would go to the panel for an answer to the question of
14 why we chose to restate the DOE key factors, or why we
15 chose the DOE factors as our key factors. I don't know if
16 you mentioned, though, when you were talking or not, Mal,
17 but if -- it seems like there's a question on the floor
18 for you on that.
19 MR. AUSTIN: Well, we have to start somewhere
20 in picking factors. Being an author, a co-author with
21 Meg, I tried to step back and be truly objective and not
22 let my own biases creep in in characterizing a program
23 that has been underway for many decades and with a lot of
24 people saying "with no progress."
25 I thought it would be better to take a DOE

1 characterization of the national program rather than
2 insert my own biases. Certainly, we can take a look at
3 developing factors according to NRC. It's a good
4 question.
5 MR. CAMERON: Mal, do you have something to
6 add?
7 DEPUTY DIRECTOR KNAPP: Yes. I'd just like to
8 note that, you know, one of the reasons we are here is to
9 hear comments on the key factors, and we will be pleased.
10 We heard a number of factors already and, please, those
11 which are here that you don't want us to use for one
12 reason or another, or those which you'd like us to add,
13 we'd be very much interested in hearing that in the
14 comments.
15 MR. CAMERON: Okay. And I might add at this
16 point, just as a generic issue -- and I would ask Jim
17 Milhoan to correct me if I'm wrong about this. The issue
18 came up yesterday in a discussion of the co-regulator
19 status of agreement states. There is a lot of things that
20 are written in the issues papers. The Commission reviewed
21 the issues papers, and they gave a preliminary option.
22 But the Commission didn't necessarily endorse every
23 factor, everything that was put forward in an issues
24 paper. I mean, they were basically a discussion vehicle.
25 Or is that a difficult question to answer?

1 MR. MILHOAN: No, it's not a difficult
2 question to answer. In fact, as I said in the opening
3 remarks, our work was to produce to the Commission an
4 issue paper with a wide variety of options.
5 The Commission, in its comments back to us in
6 the staff requirements memorandum, did select a
7 preliminary view. But with respect to those others that
8 they did not select, I really can't say they reviewed
9 every detail and would have agreed with every statement
10 made in there, because the purpose of the papers was to be
11 able to focus a discussion on these directional setting
12 issues so that we could then determine the direction for
13 the agency to incorporate in their strategic plan, which
14 is the primary document that will be produced.
15 The issue papers have a function, a limited
16 function, and a one-time function, and we will not carry
17 those issue papers forward. Rather, we will incorporate
18 the Commission's preliminary views into our strategic
19 planning document; and, therefore, at that time the issue
20 papers have served its very limited purpose.
21 MR. CAMERON: And served the purpose of being
22 a vehicle for getting comment from the public on those
23 issue papers, so that that can go to the Commission for
24 incorporation into their decisionmaking.
25 We also I think heard an endorsement of

1 option 1, the Commission assuming a greater leadership
2 role. There is a number of suggested mechanisms in
3 option 1 -- a congressional acceptability finding. I
4 don't know how that relates to the other suggestion in
5 option 1 of the Commission certifying rather than
6 licensing. Is that an either/or proposition or --
7 DEPUTY DIRECTOR KNAPP: I think the
8 fundamental concept in option 1 -- that we would simply
9 take a greater leadership role than we have now. There
10 are a number of things that we could advocate to Congress,
11 such as certification rather than licensing.
12 MR. CAMERON: I see.
13 DEPUTY DIRECTOR KNAPP: Such as a decision by
14 Congress.
15 MR. CAMERON: Okay.
16 DEPUTY DIRECTOR KNAPP: Such as a change from
17 DOE's development of the facility to the development of
18 this facility by a private corporation. What we were
19 simply looking at was going beyond where we are now, which
20 is to develop regulations and the ability to implement
21 them, and saying, "This is what we think needs to be done
22 nationally to get the job done." John may want to add to
23 that.
24 MR. CAMERON: To coin a phrase, why don't we
25 take a vertical slice on --

1 (Laughter.)

2 -- option 1. Do people have opinions about

3 some of the solutions that are offered in option 1?

4 "Solutions" is probably the wrong word. But some of the

5 suggestions by how NRC could take a stronger leadership

6 role? Are there any comments on any of those?

7 Okay. How about other discussion on other

8 options? I thought it was interesting in option 2 that

9 the suggestion was made that we somehow try to close out

10 issues earlier. I believe it was on option 2. Rulemaking

11 was suggested, some type of licensing activity where we

12 would close out issues.

13 I know that issue closure has always been a

14 hot issue for the State of Nevada. I don't know whether

15 you want to say anything about that, Dennis, from a Clark

16 County perspective.

17 MR. BECHTEL: Well, just the fact that it kind

18 of goes back into just the uncertainty in the program

19 right now and the fact that I'm not sure I totally agree

20 with the vertical slice approach. I'm not sure sometimes

21 you can extrapolate from a smaller issue, you know, the

22 entire problem. But I think wrestling with all of the

23 issues as early as possible I think is, you know,

24 something that should be done.

25 MR. CAMERON: Okay. Thank you, Dennis.

1 Anybody have any comments on issue 2? We have heard some
2 support for option number 1 and option number 5, and the
3 Commission's preferred or preliminary option was option 3,
4 maintain NRC's existing high-level waste repository
5 program. And why don't we go to the agreement states, or
6 are you going to be a private citizen?
7 MR. COLLINS: Steve Collins representing the
8 Organization of Agreement States.
9 Each state that did comment on these through
10 the Organization of Agreement States does currently have
11 operating power reactors within its boundaries, and the
12 states that provided comments were split between
13 options 2, 3, and 5, and we have heard about 2 and 5
14 already from the other people here.
15 For option 2, as the courts have already
16 decided, DOE is legally obligated to take the spent fuel.
17 The NRC should presume on the assumption that DOE will and
18 resources should be dedicated accordingly. NRC should
19 assume that the important elements of the national high-
20 level waste program include not only a repository and
21 centralized interim storage, but also on-site dry cask
22 storage. Simplification of the hearing process, pursuing
23 binding resolution, and early negotiation of issues are
24 all worthwhile for NRC to explore.
25 For option 3, NRC should maintain its existing

1 high-level waste repository program, and for option 5
2 something must be done soon to address the storage of
3 spent fuel in the near term before a repository opens.
4 Option 5 offers the clearest option for this to occur.
5 The interim storage of spent fuel should be
6 the preferred option. Options that short circuit the
7 characterization process should not be accepted. The
8 repository itself has become very politicized. Whatever
9 is done with high-level waste and spent fuel must be safe.
10 Full licensing of the repository is preferred. No
11 shortcuts should be allowed.
12 If Yucca Mountain proves to be unsuitable, it
13 should not be used. If that occurs, a fallback such as
14 interim dry cask storage should already be in place to
15 avoid a crisis. In the event Yucca Mountain is
16 unsuitable, other long-term solutions should be in place.
17 The most cost effective option is to allow dry storage at
18 this point.
19 The NRC should encourage Congress to move
20 towards dry storage and using DOE sites for MRS
21 facilities. DOE owes the electric utility something for
22 all of the wasted time and utility's money on this issue.
23 DOE should be a part of the interim solution.
24 Look at how long it has taken for DOE to get
25 the WIPP started. At DOE's current pace, the process of

1 finally siting a repository will outlast the lifetime of
2 all of our reactors.
3 MR. CAMERON: thank you, Steve, and again,
4 thank the agreement states.
5 Mal?
6 DEPUTY DIRECTOR KNAPP: Steve, I had a couple
7 of questions on that you may or may not be in a position
8 to clarify. I think you said that interim storage is the
9 preferred option. Just to be clear, I infer you mean
10 centralized interim storage as opposed to at reactor
11 storage? Or is an intent available from what you have in
12 front of you?
13 MR. COLLINS: The statement doesn't qualify
14 which. It is basically indicating that every one of those
15 options -- the interim storage at a site is something that
16 is needed right now in the current, but that's not a
17 desirable long-term -- you know, that's why we --
18 DEPUTY DIRECTOR KNAPP: All right.
19 MR. COLLINS: -- are in favor also of MRS.
20 Don't leave it at the reactor sites long term but have an
21 MRS until you do get a disposal facility, because we do
22 agree that something deep underground and retrievable
23 would be the long-term permanent solution.
24 DEPUTY DIRECTOR KNAPP: All right.
25 MR. CAMERON: So you would essentially -- you

1 and Jim Riccio are on the same page on that in terms of
2 long-term monitored storage.
3 MR. COLLINS: Yes.
4 MR. CAMERON: Do you want to put that on the
5 record or --
6 MR. COLLINS: Yes.
7 MR. CAMERON: Yes.
8 (Laughter.)
9 And, Mal, do you have other clarifications at
10 all?
11 DEPUTY DIRECTOR KNAPP: There was a comment I
12 think about shortcutting the process. If you could read
13 that again, I think that may lead to a question.
14 MR. COLLINS: Yes. The statement is just "No
15 shortcuts should be allowed." A full licensing process,
16 with no shortcuts, should be --
17 DEPUTY DIRECTOR KNAPP: Okay. I could --
18 MR. COLLINS: -- by an independent regulator
19 is what we're talking about.
20 DEPUTY DIRECTOR KNAPP: Okay. I could infer
21 several things from that, possibly including a comment on
22 DOE's viability assessment. When you provide your final
23 written comments, if that were to include that that would
24 be helpful to us.
25 MR. COLLINS: We'll try to do that.

1 MR. CAMERON: Okay. Thank you.

2 Do we have some other comments? I think we

3 have gone through most of the options.

4 MS. FLEMING: Can I ask one question on

5 option 1?

6 MR. CAMERON: Sure. And let's go back to Jane

7 Fleming and Jim Riccio, if you want to comment to on

8 anything that --

9 MS. FLEMING: Under option 1, there is a

10 discussion in the paper of a quasi-government agency. I

11 was hoping that I would hear some discussion on that to

12 get a position one way or another on that. Right now,

13 knowing little about that, I don't think I'd be in favor

14 of that suggestion, but I was hoping to hear from some of

15 you people as to what you think. Now I want to be

16 facilitated, too.

17 MR. AUSTIN: Actually, that is not an original

18 idea. Back in 1983 when Congress passed the Nuclear Waste

19 Policy Act it mandated such a study. Should the program

20 be moved out of the extremely large Department of Energy

21 complex, separated into an organization dedicated to a

22 solution for the high-level waste problem?

23 That study was carried out by a blue ribbon

24 panel. In I think it was 1984 they submitted their report

25 to Congress, and the response back was: it would delay

1 the program if you did this.

2 (Laughter.)

3 So the thought is to have dedicated people

4 focused solely on the solution to the high-level waste

5 program -- no other interest, but a safe solution, perhaps

6 a restructuring of the salary levels that these people

7 would be paid -- so that type of -- have I clarified it

8 enough?

9 MR. CAMERON: Okay. Thanks, John. And that

10 suggestion in the paper is in the context of things the

11 Commission might advocate as part of their stronger

12 leadership role in terms of refocusing the program.

13 Jim, do you have anything to say? Okay.

14 Anybody have any final words on this before we

15 take a break? Sure.

16 MR. CRAWFORD: Sid Crawford with SAIC.

17 One of the problems I see here right now is

18 that we don't appear to have all of the interested parties

19 involved to discuss this particular part. In particular,

20 is there anyone here from DOE RW? Okay. I haven't heard

21 much comment on what DOE's position is with respect to

22 these particular items. I know I haven't heard anything

23 from DOE EM on the high-level waste program that is going

24 on.

25 I think that these all need to be brought into

1 the record before the NRC makes final decision on these.
2 I think that the Senate certainly expressed its sense in
3 the Senate 1936 debate concerning on-site storage versus
4 centralized storage, and I think that ought to be
5 considered as well. In other words, I think there's a lot
6 of opportunity for additional viewpoints still to be
7 raised.
8 MR. CAMERON: Thanks, Sid. I think we would
9 agree with you on that, and we would hope to hear from
10 DOE, not necessarily now if you don't want to say
11 anything, but at least in prepared comments. And I take
12 it you'd like to comment.
13 MR. EINBERG: Chris Einberg, DOE.
14 Presently, we are reviewing the issue paper,
15 but preliminarily I have to say we're probably going to
16 support option 3. This will give the revised program plan
17 the opportunity to go to fruition and support the
18 viability assessment that we're working on currently. And
19 so our preliminary views are option 3, and we're going to
20 submit detailed comments before November 15th.
21 MR. CAMERON: Okay. Thanks. It's Chris?
22 Thank you.
23 Do we have any other silent stakeholders out
24 there, so to speak, who might want to put something on the
25 record at this point?

1 Yes, Lynne?

2 MS. FAIROBENT: Lynne Fairobent.

3 Just to follow up with what Mr. Crawford said,
4 I believe it was, from SAIC, when I read the paper it's
5 heavily focused on high-level waste program as it relates
6 to the issues of spent nuclear fuel. He brought up the
7 issue of DOE's high-level waste program that is not the RW
8 activity but is the defense high-level waste program that
9 EM is currently working on the processing, treatment,
10 whatever you want to call it, storage aspects of it.

11 I continue to be perplexed in that every time
12 the high-level waste topic is brought up that amount of
13 material seems to be conspicuous by its absence. And if
14 you take a look at volumewise and curie content and stuff,
15 there's a lot of real issues that are associated with
16 that, especially in light of the fact that the
17 demonstration project for the defense high-level waste
18 tanks at Hanford, the TOURS project, is getting underway,
19 and NRC's role now in being prepared to regulate the
20 privatization aspects under that program coming up. I was
21 a little bit concerned that I didn't see discussions in
22 that vein in this option paper.

23 The DOE PEIS for waste management does have a
24 high-level waste chapter, and that chapter is focused on
25 the defense high-level waste and not DOE spent fuel. They

1 are currently in the process of manufacturing processing
2 the high-level waste canisters, both at Savannah River and
3 at West Valley. So I think that perhaps as you go back in
4 and look at this issue paper it may be helpful to also
5 take a look at the considerations on the defense high-
6 level waste side and not simply the spent fuel issues.
7 MR. CAMERON: Okay. Thank you again, Lynne.
8 Let's take a break until 25 to.
9 Okay. Dennis, one last comment.
10 MR. BECHTEL: One last -- I'd like to make
11 just a continued pitch for your licensing support system
12 advisory review panel. I was kind of sorry I didn't see
13 that in the paper.
14 For those of you who aren't aware of that,
15 it's a multi-jurisdictional group who -- the first work
16 done in negotiated rulemaking -- I think it was Part 2 --
17 and in the course of our work have discussed a lot of
18 other issues as well, and I think it has been an
19 opportunity for involvement by all of the affected
20 counties, the State of Nevada, Department of Energy site.
21 I think that's -- I would hope that that support will
22 continue.
23 I know you've had some funding problems with
24 that for the last couple of years, but I would hope that
25 more funds would be put to that, because I think it's a

1 good group to discuss issues like this.

2 MR. CAMERON: Thanks, Dennis. I think that's

3 probably an important point in terms of, for example,

4 option 2 perhaps, reducing uncertainty.

5 But thank you all for that great discussion on

6 low level and high level. Let's take a break and be back

7 at say 25 to. That's a short break. But we have a

8 scheduled 4:00 wrap-up. I don't think we're going to need

9 4:00 to 4:30 for a wrap-up. So if we go to 10 after or so

10 on the very important subject of decommissioning, we can

11 do that. But let's try to get back in about 12 minutes or

12 so.

13 (Whereupon, the proceedings in the foregoing

14 matter went off the record at 3:26 p.m. and went back on

15 the record at 3:42 p.m.)

16 MR. CAMERON: Okay, everybody. We're going to

17 get rolling now for the last paper in this arena -- a very

18 important issue, obviously, the decommissioning of non-

19 reactor facilities. And we've already seen the potential

20 efficacy or transferability of some of the options from

21 this paper to perhaps the reactor decommissioning area.

22 And we're going to take this as far as it

23 goes, but I think at around 10 after 4 we're going to have

24 to wrap it up so that we can have a final brief closing

25 session, and I'll get one idea out right now. Just

1 remember there are other ways to comment -- Internet, hard
2 copy. There is comment forms here if you want to jot a
3 short comment down. There is obviously this form. And
4 don't forget the video cam. And that guy is going to be
5 there for, what, the next month so that people can come
6 in? I think he'll know, okay.
7 DEPUTY DIRECTOR KNAPP: Okay. The last issue
8 paper. Reminds me of the way that Johnny Carson used to
9 open the last envelope.
10 This one is on decommissioning, non-reactor
11 facilities. And the specific issue is: what should the
12 NRC's strategy to take advantage of new and different
13 approaches to optimize site remediation of the site
14 decommissioning management plan and other problem sites?
15 Our real focus here is on decommissioning of problem
16 sites.
17 We have had many licensees over the years. We
18 have decommissioned many of them. Almost without
19 exception this goes smoothly, but there have been
20 exceptions. There are sites out there -- right now I
21 think they number about in the forties -- where there are
22 simply problems. In a number of cases, we have licensees
23 who do not have the financial ability to decommission,
24 decontaminate, remediate as needed.
25 In some cases we do not have licensees. We

1 have responsible parties, but the licensees may no longer
2 exist as an organization, and sometimes we have trouble
3 finding responsible parties and convincing them that they
4 are responsible parties.
5 These sites take a great deal of time and
6 energy to remediate. They require a great deal of staff
7 time. They require a great deal of management attention.
8 The process takes longer than we would like; it takes
9 longer than the public and Congress would like.
10 What we were looking at in this paper were
11 ways that we could make this work better. We think that
12 we could do this more effectively. We think it would
13 benefit the public, it would benefit us, and in some cases
14 we think it would benefit the licensees or responsible
15 parties.
16 One of the concerns we have -- as I look at
17 the key factors, you can see I've already spoken briefly
18 to the first one, where we have people who are
19 responsible, who are unable or unwilling for various
20 reasons to decommission. Unwilling could be, among other
21 things, that they do not wish to spend their company's
22 resources in that direction, or they are concerned that if
23 they do it it could open them up by simply accepting
24 responsibility to future liability should the site need to
25 be cleaned up further in response to some future standard

1 that could be promulgated.

2 There are limited NRC resources available to

3 address all sites within the timeframes desired by the

4 Congress and the public. We would like to move faster,

5 but these are time-consuming projects. Our legal

6 authority is limited at most of the sites because of the

7 relatively low levels of contamination and risk.

8 We also have a concern that as we proceed

9 towards remediation the proposed groundwater requirements

10 by EPA -- that is to say, four millirem -- we could find

11 rather difficult to have the licensees implement at some

12 of these sites within the financial capabilities that they

13 have.

14 With these key factors we developed a set of

15 nine options. I'd like to note that these options were

16 developed by Tim Johnson, the author that sits with me.

17 Tim is principally responsible for our site

18 decommissioning management program. And among the

19 alternatives that we offer here are continue the existing

20 program. We could change the decommissioning review

21 process.

22 The process currently involves our, in some

23 cases, reviewing site characterization plans. Once they

24 have been approved we review decommissioning plans, and

25 then finally we approve the completion of the

1 decommissioning and survey to certify decommission has
2 been properly carried out. We might change that process
3 to reduce or eliminate some of the early reviews by the
4 NRC and have the licensee proceed directly to
5 decommissioning without our review of characterization and
6 planning processes, at least in the detail that we now do.
7 The third option would be we could change the
8 residual contamination criteria and review standards. We
9 could increase the amount of contamination that would be
10 permitted to remain at a site, particularly in the case of
11 a site where there would be some sort of institutional
12 controls, or we could look at the stands. There are those
13 that argue that our present method of applying our
14 decontamination criteria is extremely conservative, and
15 perhaps less conservative methodologies could be used.
16 We could adopt the U.S. EPA Superfund
17 approach. Those of you who are familiar with that know
18 that EPA has the power to tackle responsible parties.
19 Whether they are licensees or not, if they have been
20 contributors to the site, EPA has the power to assess
21 triple damages. This can tend to make it much easier to
22 convince responsible parties to do the right thing in a
23 timely way.
24 We could regulate some of the material in
25 these sites, source material, consistently with what is

1 now being done on naturally-occurring and accelerator-
2 produced materials, NARM. In a number of areas there are
3 tailings piles out there which very much resemble the ones
4 that NRC regulates, but because they are not source
5 material they are not regulated.
6 It might be worthwhile to consider whether if
7 they do not need to be regulated to that extent, if
8 they're outside the NRC's purview, is it a good use of
9 resources to regulate them as carefully as we do simply
10 because they're within NRC's purview?
11 The next option is to focus on decommissioning
12 where progress can be made. That is, if we have a willing
13 licensee, a financially capable licensee, we proceed. In
14 the event that we get stalled, we would transfer these to
15 the EPA's Superfund program, giving them an opportunity to
16 use the legal tools at their disposal, recognizing as
17 well, however, that the priorities assigned by EPA might
18 not be as high as they would be by the NRC simply as a
19 result of the large number of sites EPA has on its plate.
20 We could take an aggressive position to
21 develop a regulatory framework for lower cost options.
22 For example, if we have material that very much resembles
23 uranium mill tailings, perhaps it could be disposed of at
24 uranium mill tailings sites at an advantage -- financial
25 advantage -- for the site operator and for the person

1 responsible for the SDMP site.

2 We could develop a strong litigative strategy.

3 As I mentioned earlier, because of the low risk associated

4 with a number of these sites, the NRC's legal ability to

5 move rapidly can be limited. Perhaps we should reexamine

6 our regulations to give us the tools that we need to move

7 rapidly to do such things as impound funds of responsible

8 parties so that we can assure they are available for site

9 decommissioning and not available for something else.

10 Finally, we could seek Superfund authority.

11 The Commission's preliminary views. They had

12 quite a few.

13 The overall sense of the paper and the sense

14 of the Commission's views -- this provides some additional

15 flexibility that the staff can use, and some additional

16 power that the staff can use, to get these sites

17 remediated in a more cost-effective way.

18 Among the things that the Commission endorses

19 in a preliminary view would be to change the review

20 process, to focus on sites where we can make progress and

21 transfer stalled sites to EPA, take an aggressive position

22 to come up with lower cost options, and to develop a

23 strong litigation strategy.

24 They did have a couple of thoughts. We are

25 concerned that if we were to reduce the amount of

1 preliminary review work we do on decommissioning that some
2 of the licensees and responsible parties may not be
3 technically competent to do the job properly. In fact,
4 they might attempt to decommission, do it poorly, and
5 result in higher costs to the NRC and to the responsible
6 party.
7 So it would make a great deal of sense in the
8 Commission's preliminary view to test this on a pilot
9 scale and determine whether or not this would, in fact, be
10 successful on a broad scale. We should seek volunteers to
11 participate in this process, and we should seek comment --
12 we do seek comment -- as to whether we should hold
13 workshops or seminars for licensees and responsible
14 parties to help them better understand what they would
15 need to do.
16 The last one, with regard to option 6,
17 transferring sites to EPA Superfund, the Commission should
18 look at transferring sites where we have -- where the risk
19 is low. We also might want to consider stalled high-risk
20 sites or low-risk sites where progress is being made. You
21 can sort of have a box -- stalled high risk, stalled low
22 risk, progress being made in low risk, progress being made
23 in high risk. And they would have us look at both risk
24 and progress on site remediation when considering whether
25 to transfer a site to EPA.

1 The Commission would not like to have us just
2 do this. We should not preclude the Commission itself
3 from reviewing a site where conditions warrant. So this
4 is what we're thinking about. Again, to state it very
5 simply: the Commission's preliminary views would give the
6 staff additional tools in a variety of areas to move more
7 efficiently and more aggressively to get these sites
8 cleaned up.
9 And with that, I'd like to turn it over to
10 Chip for your comments.
11 MR. CAMERON: Okay. Thanks, Mal.
12 There is a lot of options that were under
13 consideration here, and I guess I would just start off
14 with, does anybody want to make any general observations
15 about this issue, the factors which I think were well
16 stated by Mal and some of the -- I think that Terry was
17 pretty creative in coming up with some of these -- a lot
18 of these options. But do we have some general
19 observations? Steve, do you want to start off?
20 MR. COLLINS: Steve Collins, Organization of
21 Agreement States.
22 The first sentence of the summary comments for
23 the States was basically what I read as an agreement with
24 the Commission's views. It says, "The agreement states
25 believe that adequate flexibility should be available in

1 both policy and regulations to allow unique approaches to
2 decommissioning and the funding of decommissioning."
3 MR. CAMERON: Is that clear, Mal, what that
4 comment is?
5 DEPUTY DIRECTOR KNAPP: Think -- again, I
6 would interpret that as Steve has, that that's pretty much
7 consistent with the Commission's preliminary views.
8 MR. CAMERON: Okay. Good. So that's
9 consistent with the preliminary option.
10 Do we have some other comments on the
11 Commission's preliminary option, or any of the options
12 here?
13 Lynnette?
14 Tom, go ahead. We'll let the States finish,
15 and then let's go to Lynnette.
16 MR. HILL: In looking at what the Conference
17 of Radiation Control -- Board of Directors of the
18 Conference state, I think it is fair to state that their
19 discussion of the options is they're in agreement with the
20 Commission's preliminary views as well.
21 MR. CAMERON: Really? Okay.
22 MR. HILL: I think so.
23 MR. CAMERON: Okay. Lynnette is going to
24 defer to Henry.
25 MR. MORTON: Henry Morton.

1 I think that there are a number of good
2 thoughts among the options. And I think also, in the
3 interest of looking through these to try to find ways
4 where progress can be made that would help the agency to
5 set its direction, there are a number to choose from and a
6 number of things to consider in here.
7 With respect to decommissioning non-reactor
8 sites or materials sites, one of the factors is large
9 volumes of very low activity soil and debris, and what can
10 we do with those, and what affects the volumes of those,
11 and what affects the ability of the licensee to make
12 progress in decommissioning. There are a number of things
13 I think to consider.
14 One of the things that I mentioned this
15 morning, that I'm generally in favor of the risk-based
16 performance-oriented regulation, and in this regard there
17 is an item to consider. While favoring that in general, I
18 would suggest that you should not adopt performance-
19 oriented regulations without knowing whether or not they
20 are implementable.
21 And in that regard, we have seen, I think, an
22 example of this already in that in looking through the
23 proposed EPA and NRC guidance or regulations that we find
24 essentially a 15 millirem per year limit is not
25 implementable for the sites that are the most affected by

1 the rule. Mainly these 30 or 40 sites are the sites that
2 have large volumes, low activity thorium and radium-226 on
3 them.
4 For these sites, for instance, to put it in
5 some perspective, 15 millirem per year is about one-third
6 of the background dose rate that occurs from the same
7 radionuclide series typically in nature. That is, if we
8 see typically 40 or 50 millirem a year from such -- from
9 soil, so we begin to see the difficulty of having chosen a
10 risk level translated to dose without really knowing
11 whether it's implementable or not. And so I think there
12 needs to be some deliberation in the choice of
13 performance-based rules.
14 I think that from among these options there
15 are ways to make progress for the agency to set near-term
16 directions, goals, and intermediate and longer term ones
17 to go ahead and make progress without putting all of the
18 choice into one of these long-term options.
19 For example, early on some ways that you could
20 evolve in a sensible fashion I think were mentioned --
21 allow the intruder dose to go up to 500 millirem per year.
22 The 100 value we've seen is not a particularly useful
23 increment over the unrestricted release level that has
24 been proposed.
25 Allow more realistic dose assessment

1 scenarios. Allow for a probability of intrusion, and
2 incorporate or allow for the probability of occurrence in
3 some of the scenarios. Allow restrictive use scenarios
4 without having to do an EIS every time one of these is
5 proposed or approved.
6 Another item -- I would encourage you to work
7 with EPA to select a dose limit above 15 millirem that
8 allocates more than one-seventh of the 100 millirem to
9 decommission sites, because when we look at the choices or
10 the bases on which the 15 millirem was chosen, one was
11 allocation, and for these -- many of these sites you could
12 allocate much more than the one-seventh. And there have
13 been others who have recommended a third, a fourth.
14 And the ALARA as a basis, we have submitted
15 comments showing that ALARA analysis and the GEIS was
16 basically without basis and principle. It should be
17 reconsidered.
18 On a risk level, 100 millirem is closer to the
19 zone between tolerable and unacceptable risk than
20 certainly the 15. So I think there is room to work with
21 EPA in a more aggressive fashion to try to get something
22 that is realistic and implementable for those sites that
23 need implementation the most.
24 I think in the near term, on a decisionmaking
25 basis, you could focus more on performance end points than

1 on the process by which you achieve that. And I think we
2 are seeing progress with respect to things, for example,
3 in diminishing the importance of the characterization
4 report and things of that kind.
5 And I think that some other points in that
6 regard to consider -- in applying focus, where you can do
7 that in the near term in a more performance-oriented
8 basis, a licensee, for example, in this viewpoint really
9 ought to be allowed if he is -- if he is technically
10 capable to do so, to dismantle more of his facility,
11 remove contaminated material more than he is able to now,
12 and dispose of that at an authorized disposal site without
13 having necessarily to have a full-fledged approval for his
14 decommissioning plan.
15 The agency in the near term could focus on
16 that licensee and the contractor's ability to perform this
17 kind of interim work on his quality assurance, and
18 particularly on the health and safety plans to protect the
19 public while this is occurring, on residual criteria and
20 on the final status survey.
21 So the focus then would be less on how things
22 were done and more on how -- on the performance end point.
23 I think also that the -- in the intermediate
24 term, the agency ought to and could make progress with
25 respect to disposal by reviewing the safety of the

1 disposal of the uranium- and thorium-contaminated soil at
2 mill tailings sites. And should those be found
3 acceptable, go ahead and make a policy decision that it's
4 acceptable to do so. If an EIS is needed, go ahead and
5 get with that, so that the licensees can have some more
6 assurance of economical and assured disposal.
7 In the intermediate term, I think that, again,
8 reconsider whether an environmental impact statement is
9 needed for each restricted release. This is the kind of
10 thing that can really slow down a decommissioning project.
11 If it is, go ahead, proceed to do a GEIS for sites
12 requiring restricted releases, where you can, so that you
13 don't have to go through this process every time there is
14 a restricted release.
15 With respect to probabilistic type approach, I
16 think in the near term on a decision basis the agency
17 should consider accepting the use of, for example, DOE
18 Argonne's probabilistic version of RESRAD for evaluating
19 these types of sites, or Battelle Northwest equivalent
20 pathway dose calculation, a program of this kind.
21 This would be an incremental step that would
22 help the materials licensees in their evaluations to move
23 toward some kind of probabilistic assessment in a more
24 expeditious fashion than some long study. And then I
25 think perhaps in the longer term, as I mentioned this

1 morning, giving greater attention to fundamental
2 radiobiology studies to resolve the DNA repair threshold
3 viewpoint versus the linear no threshold viewpoint.
4 And I think -- overall, I think that with
5 respect to the choice of the option, some of which seem to
6 suggest downsizing, that to make progress in the near
7 term, and to consider these kinds of things, it appears to
8 me not to suggest downsizing.
9 MR. CAMERON: Thank you very much, Henry, for
10 that detailed list of suggestions. I heard some things in
11 there that I don't think we covered in the paper, so that
12 should be useful now or --
13 Tim, do you have any comments?
14 DEPUTY DIRECTOR KNAPP: Tim may have a
15 comment. It's a broad and detailed list and things that
16 -- as I look at my watch, I want to think about a number
17 of those carefully as we provide the final comments to the
18 Commission.
19 MR. CAMERON: Tony?
20 MR. THOMPSON: Yes. I had a couple of
21 questions and some thoughts on behalf of the uranium
22 producers.
23 The idea of not staying involved in getting
24 approved site characterization, particularly where we're
25 dealing with naturally-occurring radionuclides, seems to

1 me to be a very bad idea. As perhaps you suggested in
2 your comment, Mal, that it may well lead to a problem
3 later when you go for your final verification study, and
4 it's bound to lead to reopeners at some sites.
5 So I think the idea of not staying involved at
6 the site characterization -- at the beginning of the
7 process, which I think is one of the most important parts
8 of the whole process of decommissioning, it's a bad idea
9 for the reasons that you suggest. So I think reopeners
10 would be bound to happen if there aren't guidance, and if
11 there isn't approval and agreement on site
12 characterization right up front.
13 DEPUTY DIRECTOR KNAPP: Recognizing that that
14 is contrary to the Commission's preliminary view,
15 presuming that you folks will be providing us written
16 comment, if you can elaborate on that in the written
17 comments, the Commission would be quite interested.
18 MR. THOMPSON: Yes.
19 DEPUTY DIRECTOR KNAPP: Thanks.
20 MR. THOMPSON: Secondly, I'm not sure I
21 understand -- I thought when you said "develop a strong
22 litigation strategy" there was perhaps the suggestion of
23 changing the regulatory basis on which NRC can take sort
24 of what we might call affirmative action, say to issue an
25 order. Was that the intent?

1 In other words, right now if we are dealing
2 with a licensed site, unless there is some sort of
3 imminent hazard, NRC does not -- its policy is not to go
4 and -- is to rely on the licensee, to work with the
5 licensee, then have the licensee propose, NRC dispose of
6 the licensee's proposal. Was there a thought that you
7 would change that and make -- change your regulatory
8 approach so that you could be more aggressive in not
9 waiting for proposals but ordering?
10 DEPUTY DIRECTOR KNAPP: No, it was not -- let
11 me give you a possible example. We are concerned about
12 remediation of a site. We have a licensee who we have
13 reason to believe is rapidly funneling money into another
14 company so that they can create a bankrupt company that is
15 responsible for the site and all of the funds can go
16 somewhere else.
17 What action we might take under those
18 circumstances at this point could be very limited, because
19 arguably that is not a serious and immediate threat to
20 public health and safety. It's a financial threat. And
21 I'm speaking here with great confidence because I have an
22 attorney who is probably going to correct me to no end in
23 a couple of minutes.
24 But the concern, at least in my mind, is: do
25 we, in fact -- have we provided the right regulatory basis

1 to take some of the actions that we think we need when
2 things are happening fast and the going gets rough? It's
3 not clear to me that we do have that -- we do have things
4 that our attorneys can work with.
5 Larry, would you care to add to that or
6 clarify?
7 MR. CHANDLER: Just to observe that I don't
8 think we are disagreeing with one another. I think we are
9 fundamentally saying the same thing, and that is what
10 basis we would have for taking immediately effective type
11 of action. And that has been an issue that we have
12 confronted on a number of occasions.
13 MR. THOMPSON: I can give you one example that
14 makes me nervous, and that is that there are people that
15 may want to have a site moved. And the NRC's position is:
16 the option on the table right now is not to move the site
17 but to reclaim it in place. And the reason that option is
18 the option on the table is that's the licensee's proposal,
19 and based on the fact that we don't have an imminent
20 hazard here, we don't have any basis for going forward. I
21 would hate to see that changed.
22 MR. CHANDLER: And completely understanding
23 the context of this particular --
24 MR. CAMERON: I think you'd better use this.
25 MR. CHANDLER: The context for this option was

1 more along the lines of I think the way Mal was describing
2 it. That is, that the agency has identified a need for it
3 to act on a prompt basis, as opposed to the situation in
4 which there is a proposal sitting before it, and it's a
5 question of whether the staff would support or not support
6 a particular option at that point.
7 MR. THOMPSON: Okay. That clarifies it.
8 I guess another question I have is: why on
9 earth would you want to involve your licensees with what's
10 going to be the most screwed up program that has ever
11 been --
12 (Laughter.)
13 -- put on the books? So why would you want to
14 set precedent for moving things to Superfund? I can't
15 imagine why.
16 (Laughter.)
17 Because if you set that precedent up, who is
18 to say that they are not going to come and be very
19 aggressive. Right now there is a policy not to put NRC-
20 regulated sites on the NPL. That's an EPA policy. But
21 you start moving sites over to EPA, and the next thing you
22 know you're going to find people that want to push reactor
23 site closings over to EPA. And I think it's a bad idea.
24 It's not a very good program, and I think our people would
25 be very much opposed to that concept as a general approach

1 to things.

2 Finally, as sort of a placeholder, because we

3 haven't had the time to do it, based on the sort of

4 strategic look here, the uranium producers are going to

5 present -- and they're going to make a note of this in

6 their comments -- a series of issues that are interrelated

7 that address the regulatory program for those facilities,

8 including such things as the use of mill tailings for

9 other types of disposal.

10 And there are a series of decisions that have

11 been made by the agency over time which have led to some

12 serious conflicts in the interpretation of authority, and

13 what does it mean. And so just to tell you now that we

14 intend to make a note that we're going to propose a sort

15 of strategic look at some of these decisions that have

16 been made, and it goes directly to the one question about

17 using existing sites, for example, or for other kinds of

18 disposal. So I just note that for the record, and we will

19 put a placeholder in our comments.

20 And finally, I agree with Henry. On the 15

21 millirem standard, the issue of dividing up the dose is

22 certainly in keeping with the recommendations of ICRP and

23 other bodies. But at least in the proposed record there

24 was no demonstration or there was no analysis by NRC of

25 the likelihood of anybody being exposed to seven of these

1 disposal facilities, or even of some disposal facilities
2 and other nuclear fuel cycle facilities such that there
3 would be a likelihood of exceeding the 100 millirem dose
4 to the public.
5 And if you're going to go forward with
6 something like that, it seems to me you owe it to the
7 public and to the licensees to do some sort of analysis on
8 that particular issue.
9 MR. CAMERON: And did you make that point in
10 the comments on the proposed rule?
11 MR. THOMPSON: We did.
12 MR. CAMERON: Okay. Good, because that's
13 where it will be considered.
14 Tom Hill, did you have any further comments,
15 brief comments, from --
16 MR. HILL: In the interest of time, suffice it
17 to say that in general the Board of Directors agrees with
18 the Commission's preliminary views.
19 MR. CAMERON: Okay.
20 MR. HILL: We will put the rest of them in
21 writing in detail.
22 MR. CAMERON: Okay. Thank you.
23 Does anybody out there violently disagree with
24 some of the options? What was it, 2, 3A, 16? What were
25 they? You know, with any of the options that were in the

1 preliminary option?

2 I'm just trying to see if anybody has any

3 comments on the preliminary options that would indicate

4 that they may not -- that they might not be a feasible

5 choice from the standpoint of effectively cleaning up

6 decommissioned sites.

7 Lynnette?

8 MS. FAIROBENT: Uh-oh, I have to get violent.

9 Oh, no.

10 I guess I like a lot of the options, and I

11 like some of them a lot better than others. And I guess

12 what I want to comment on is the Commission didn't seem to

13 like some of the ones that would be my favorite. And one

14 of those might be to address the standards and review

15 standards that are placing some of these facilities in

16 such distress in the first place, and that perhaps you

17 could solve the problem if it wasn't -- not in all cases.

18 I realize some of these sites, your SDMP

19 sites, are going to pose problems probably regardless.

20 But it would occur to me that a lot of them wouldn't if

21 the ante wasn't so high to carry out this function of

22 dispositioning the site in a way that protects public

23 health and safety.

24 So I guess my only comment would be to, you

25 know, wonder why that particular option wasn't favored by

1 the Commission, and to suggest that certainly if it's not
2 advantageous to go back and change the basic criteria that
3 the review standards should be scrutinized very carefully,
4 and many of the suggestions that Henry had made would help
5 a lot of these facilities be able to implement the
6 standards. And that could also be more in keeping with
7 the processes that EPA uses, so it could even be an issue
8 of better consistency with another federal agency.
9 Some of these issues about considering actual
10 reuse of the site, I think some of those things are going
11 to, you know, find favor and in the process you can find a
12 standard that can be used more effectively to do what we
13 really want to do here, which is disposition these sites
14 and get on with it.
15 Thank you.
16 MR. CAMERON: Okay. Thanks, Lynnette.
17 Lynnette gave us some of her favorite options,
18 I guess. And would anybody else like to express any
19 opinions along those lines, or say anything else about any
20 of the options?
21 I know it's the end of a long day, and I would
22 just encourage everybody to send us their written comments
23 either through the Internet or hard copy on these
24 particular issues. We don't mean to try to give this
25 particular issue short shrift in any way.

1 Does anybody have any further comments?

2 Okay. Well, why don't we switch gears and

3 wrap up here. Personally, I think this was -- both days

4 were very, very effective days, and I think we got a lot

5 of -- NRC got a lot of really productive information out

6 of these sessions.

7 Now, I guess one thing that I'd want to do,

8 and I'm going to turn this over to Jim in a minute --

9 before I forget, we have four people from the NRC staff

10 that are out working the desk outside and did an

11 incredible job in terms of the administrative

12 arrangements, not only for this meeting but the other

13 meetings. And I just wanted to recognize them on the

14 record, and perhaps when you go out and leave today you

15 could give them a personal thank you. But Anna May

16 Holcraft, Libby Crossland, Anne Hoyle, and Barbara

17 Johnson, I'd just like to -- we'd all like to thank them.

18 Are there any last thoughts about our two days

19 of interaction here? Does anybody have any thoughts on

20 the process after we have, you know, been through the two

21 days? Any last comments before Jim says some final words

22 to us?

23 Okay. Jim, do you want to close out for us?

24 MR. MILHOAN: I'm usually very brief, so this

25 will not take that long. That's one of my

1 characteristics.

2 But I would like to note that we had a very

3 wide range of attendance from different organizations,

4 both individuals and other groups, in attendance today. I

5 know it has been two very long days, and we have discussed

6 a wide variety of issues.

7 I would note that I think the quality of the

8 comments has been outstanding. I think the participants

9 have provided their comments in a very professional

10 manner. I think it is a manner in which we have been

11 here; we have listened to the comments. We have a very

12 important job -- the Steering Committee and the writers

13 have a very important job before us to take both the

14 comments we have heard at this meeting and the written

15 comments and to provide our stakeholder interaction report

16 to the Commission so that we can summarize and

17 characterize the comments that we have heard, so that the

18 Commission can then make a well-reasoned decision, a final

19 decision on the issue papers that will be before them, and

20 which would then be reflected -- their final decisions

21 would then be reflected into the agency's strategic plan.

22 I would like to ask your assistance in one

23 matter, in addition to requesting your comments. We have

24 two additional public meetings -- one in Colorado Springs

25 next week and one in Chicago the following week. The

1 value of those meetings, and the value to the NRC, and
2 really to you, is through participation at those meetings.
3 So I would request that if you are not going to attend
4 those meetings that you call your friends, let them know
5 of the meetings, and encourage others to attend those
6 meetings.
7 We have made wide announcements of those
8 meetings, but I would also request you to contact others
9 to encourage their participation at those additional
10 meetings, because the value of those meetings is really up
11 to you. And the importance of those meetings, and the
12 value we get, and the comments, and the interactions that
13 we have are really important to us.
14 One last thing in closing -- as you've
15 noticed, we have requested Chip Cameron and Doug Brockman
16 to facilitate our sessions. We wanted to do that to be
17 able to provide the widest possible approach to
18 interactions with you, and we thought a facilitated
19 session would accomplish that function. I think it has to
20 a very large extent, and I do want to express my gratitude
21 to our two facilitators in facilitating the sessions to
22 obtain the comments that we did receive.
23 Does anyone else have anything that they want
24 to say before we end the session?
25 If not, thank you very much for your

1 attendance. I know it's late Friday afternoon.
2 Congratulations to those who stayed throughout the end of
3 it.
4 (Whereupon, at 4:25 p.m., the proceedings in
5 the foregoing matter went off the record.)
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C E R T I F I C A T E

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: STAKEHOLDERS PUBLIC MEETINGS ASSURING SAFE MANAGEMENT OF NUCLEAR WASTE

Docket Number: N/A

Place of Proceeding: WASHINGTON, DC

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.

Corbett Riner
Official Reporter
Neal R. Gross and Co., Inc.

Direction Setting Issue No. 5
Low-Level Waste

October 24-25, 1996

Sponsor: Malcolm R. Knapp, NMSS
Writer: James E. Kennedy, NMSS

DSI 5

- ★ What Should be the Role and Scope of the NRC's Low-Level Radioactive Waste Program?

Key Factors

- ★ Most New LLW Disposal Facilities Are Expected to Be Located in Agreement States
- ★ NRC Does Not Expect to Receive an Application from a Non-Agreement State Within the Next Five Years
- ★ The Lack of Broadly Based Public Acceptance Has Significantly Affected the Development of New Sites
- ★ LLW Disposal and Management Options Are Available Today for Waste Generators
- ★ LLW Program Has Been Reduced in Response to Government-Wide Efforts to Streamline and Reduce Costs

Options

- ★ Assume a Greater Leadership Role in the National LLW Program
- ★ Assume a Strong Regulatory Role in the National LLW Program
- ★ Retain Current Program
- ★ Recognize Progress and Reduce Program
- ★ Transfer LLW Program to EPA
- ★ Accept Assured Long-Term Storage

Commission's Preliminary Views

- ★ Assume a Strong Regulatory Role in the National Program (Option 2). This Option Would Encompass All of the Activities That Were Performed Before the Recent Reductions in the Low-Level Waste Program.
- ★ The Commission Seeks Public Comment On:
  - Whether NRC Should Involve Itself to a Greater Degree in Implementing this Option in Such a Way as to Encourage an Integrated Approach to the Regulation of LLW Handling, Processing, Recycle, and Disposal.
  - How Should NRC Address Unauthorized Disposal?

Direction Setting Issue No. 6 High-Level Waste and Spent Fuel

October 24-25, 1996

Sponsor: Malcolm R. Knapp, NMSS
Writer: John H. Austin, NMSS

DSI 6

- ★ In Recognition of Current Uncertainties, How Should NRC Approach the Present High-Level Waste Situation?

Key Factors (According to DOE)

- ★ The Lack of Consensus Among the Scientific and Technical Community and the Major Interested and Affected Parties on Fundamental Elements of the Program
- ★ The Unprecedented Nature of Geologic Disposal
- ★ The Linkages in the Law Between the Siting and Construction of a Monitored Retrievable Storage (MRS) Facility and the Licensing and Construction of the Repository
- ★ Strong Public Resistance to Waste Management and Other Undesirable Facilities
- ★ General Program and Budgetary Constraints

Options

- ★ Approach Congress and the Administration to Refocus the National Program
- ★ Reduce Uncertainty by Modifying NRC's Program
- ★ Maintain NRC's Existing HLW Repository Program
- ★ Take a Minimal Approach to NRC's HLW Repository Program
- ★ Take a Position on the Storage of Spent Fuel

Commission's Preliminary Views

- ★ Maintain NRC's Existing HLW Program (Option 3).
- ★ The Commission Would like to Explore Taking a More Active Role in Resolving Issues in the National HLW Program, Consistent with NRC's Mission.
- ★ The Commission Particularly Seeks Public Comment on What Additional Activities the NRC Might Reasonably Undertake.

Direction Setting Issue No. 9 Decommissioning Non-Reactor Facilities

October 24-25, 1996

Sponsor: Malcolm R. Knapp, NMSS
Writer: Terry L. Johnson, NMSS

DSI 9

- ★ What Should Be NRC's Strategy to Take Advantage of New and Different Approaches to Optimize Site Remediation of the Site Decommissioning Management Plan and Other Problem Sites?

Key Factors

- ★ Some Licensees or Responsible Parties May Be Unable or Unwilling to Decommission
- ★ There Are Limited NRC Resources Available to Address All Sites Within the Timeframes Desired by Congress and the Public
- ★ Legal Authority is Limited for Most Decommissioning Cases Since Contamination Is at Relatively Low Levels.
- ★ EPA's Proposed Groundwater Requirements (4 mrem/year) May Be Difficult to Implement

Options

- ★ Continue Existing Program
- ★ Change the Decommissioning Review Process
- ★ Change Residual Contamination Criteria and Review Standards
- ★ Adopt the U.S. Environmental Protection Agency Superfund Approach
- ★ Regulate Source Material Consistently with Naturally Occurring and Accelerator-Produced Radioactive Materials

Options (cont)

- ★ Focus on Decommissioning Cases in Which Progress Can Be Made; Transfer Stalled Sites to the Environmental Protection Agency's Superfund Program
- ★ Take an Aggressive Position to Develop Regulatory Frameworks for Lower Cost Decommissioning Waste Disposal Options
- ★ Develop a Strong Litigative Strategy
- ★ Seek Superfund Authority

Commission's Preliminary Views

- ★ A Combination of Options Were Selected That Would Place Appropriate Responsibility on Licensees to Remediate Their Sites While Giving NRC Appropriate Tools to Deal with Problem Sites and Licensees.
  - Change the Decommissioning Review Process (Option 2);
  - Focus on Decommissioning Cases in Which Progress Can Be Made and Transfer Stalled Sites to EPA (Option 6);
  - Take an Aggressive Position to Develop Regulatory Frameworks for Lower Cost Decommissioning Waste Disposal (Option 7) And,
  - Develop a Strong Litigation Strategy (Option 8)

Commission's Preliminary Views (Cont)

- ★ Option 2 Should Be Tested on a Pilot Scale for a Few Selected Materials Licensees to Determine the Potential Success and Effectiveness of this Option if it Were to Be Adopted on a Broader Scale.
- ★ The Pilot Program Participants Should Be Volunteers That Are Found to Be Suitable for Participating in the Pilot Program by the NRC.
- ★ With Regard to Option 2, the NRC Specifically Seeks Comment on Whether NRC Should Hold Seminars or Workshops for Licensees to Make Sure That They Understand What NRC Expects of Them and What They, in Turn, Should Expect of Their Contractors.

Commission's Preliminary Views (Cont)

- ★ With Regard to Option 6, the Staff Should Also, Consistent with DSI 12, Examine the Level of Risk Associated with Each Site. Staff Should Consider the Feasibility of Transferring the Low Risk, Stalled Sites to the EPA's Superfund Program.
- ★ Determinations on Whether to Send to EPA's Superfund Program a Stalled, High-Risk Site or a Low-Risk Site Where Progress Is Being Made, Should Be Made on a Case-By-Case Basis.
- ★ The Implementation Process for Option 6 Should Not Preclude the Commission from Reviewing a Low-Risk, Stalled Site If Conditions Warrant, Nor Should the Process Automatically Send the Site to EPA's Superfund Program.

Registered Attendees for the Washington, DC Meeting

25-Oct-96

Meeting	Last Name	First Name	Affiliation	Title
Washington, DC				
	Alkema	Ken	Envirocare of Utah	Director of Government Affairs
	Anderson	Roger	Northern States Power Co.	Director Licensing
	Ankrum	Al	Pacific Northwest National Laboratory	Sr. Program Manager
	Bechtel	Dennis	Clark County, Nevada	Manager
	Beedle	Ralph	NEI	Sr. VP
	Bell	Russ	Nuclear Energy Institute	Project Manager
	Borsum	Robert	Framatome Technologies, Inc.	Manager, Rockville Office
	Boss	Gary	Government Accounting Office	
	Bradbury	Judith	Battelle Pacific N.W. Laboratory	Senior Researcher
	Branch	Kristi	Battelle Seattle Research Center	
	Brown	Roy	Council on Radionuclides & Radiopharmace	Chairman
	Bubbosh	Paul	EPA	
	Burnfield	Dan	USDNFSB	Sr. Manager
	Burtschi	Mark	IBEX Engineering, Inc.	Manager, Business Development
	Carter	Jon	Carter and Hinman	
	Chan	Elaine	Federal Emergency Management Agency	Attorney, OGC

Meeting	Last Name	First Name	Affiliation	Title
	Chapman	Nancy	Bechtel Power Corporation	Serch Manager
	Chapple	Alan	Nuclear Energy Institute	Sr. Writer
	Ciampoli	Paul	Dow Jones News Service/Daily Press	Editor
	Collins	Steven	OAS (IL)	Chief, Div. of Radioactive Materials
	Collins	Leslie	ABB Combustion Engineering	
	Cotton	Virgill	Washington Post	
	Crawford	Sidney	SAIC (DOE)	Waste Management Specialist
	Crites	Thomas	LLNL	
	Cross	William	STS	Consultant
	Czyscinski	Kenneth	Sanford Cohen & Associates	Associate
	Daniels	Raphael	Defense Nuclear Facilities Safety Board	Senior Staff
	Fairobent	Lynne	ATL International, Inc.	Senior Policy Analyst
	Farber	Darryl	Penn State University	Research Assistant
	Fitzgerald	Duane	Government Accounting Office	
	Fleming	Jane	NNSN D.N.A.C.	
	Floyd	Stephen	Nuclear Energy Institute	Director, Regulatory Reform
	Fontecilla	Herbert	Virginia Power	
	Frantz	Steven	Morgan, Lewis & Bockius, LLP	Attorney
	Fulton	Fay	American College of Cardiology	Assistant Director
	Gamble	Robert	Woodward-Clyde Federal Services, Inc.	Consultant

Meeting	Last Name	First Name	Affiliation	Title
	Genoa	Paul	Nuclear Energy Institute	Project Manager
	Gilbert	Michael	Government Accounting Office	Senior Evaluator
	Goff	Robert	IBEX Engineering, Inc.	Manager, State Services
	Grace	Mark	Winston & Strawn	Attorney
	Grant	Jane	Yankee Atomic Electric Company	Manager, Regulatory & Industry Aff
	Green	Kimberly	Scientech, Inc.	Engineer
	Gurican	Gregory	GPM Nuclear, Inc.	Sr. II Nuc. Safety & Lic. Engineer
	Harris	Ann	We The People	Director
	Hendrichs	Lynette	Nuclear Energy Institute	Director
	Hill	Thomas	Georgia Natural Resources/OAS	Program Manager
	Hinnant	Clayton	Carolina Power & Light - Robinson Nuclear	Vice President
	Hosford	Anne	McDermott Incorporated, Babcock & Wilcox	Manager, Government Programs
	Hurt	Davis	Defense Nuclear Facilities Safety Board	Senior Systems Engineer
	Huston	Roger	Nuclear Energy Institute	Senior Project Manager
	Jacobson	Alan	State of Maryland	Lead Health Physicist
	Jarriel	Lisa	U.S. Enrichment Corporation	Sr. Regulatory Engineer
	Johnsrud	Judith	ECNP (PA)	Director
	Kimball	Karen	American College of Nuclear Physicians	Executive Director
	Kokolakis	Pete	New York Power Authority	Manager, General Licensing
	Krich	Rod	Carolina Power & Light - Robinson Nuclear	Manager, Regulatory Affairs

Meeting	Last Name	First Name	Affiliation	Title
	Leroy	Daniel	France	Counselor for Nuclear Energy
	Lochbaum	David	Union of Concerned Scientists	Nuclear Safety Engineer
	McBurney	Ruth	Texas Department of Health	Director, Division of Licensing
	McCartney	Shawna	Edlow International Company	International Affairs Specialist
	McDonough	Coleman	Comed Strategic Services	Financial & Planning Manager
	McDougall	Robert	SAIC (DOE/EM Contractor	Sr. Policy Analyst
	McIndoe	Darrell	ACNP/SNM	M.D. FACNP
	McIntyre	Brian	Westinghouse Electric Corporation	Manager, Advanced Plant Safety and
	Murray	Peter	Westinghouse Electric Corporation	Sr. Consultant, Nuclear Programs
	Nelson	Alan	Nuclear Energy Institute	Senior Project Manager
	Nichols	David	ACNP/SNM Government Relations Office	Associate Director
	O'Mara	Robert	Univ. of Rochester/ACNP/SNM	M.D.
	Olson	Phil	Government Accounting Office	
	Pauagos	Alex	Comed Strategic Services	Project Engineer
	Peterson	Scott	Nuclear Energy Institute	Director, External Communications
	Peveler	Kenneth	IES Utilities Inc.	Manager, Nuc. Lic. and Emergency
	Pfeiffer	John	Energy and Science Division, OMB	Program Exminer
	Potter	Thomas		Consultant
	Quint	Matthew	Embassy of Australia	Assistant to the Counselor (Nuclear)
	Ratliff	Richard	Organization of Agreement States	Past Chair

Meeting	Last Name	First Name	Affiliation	Title
	Reed	Kathie	Oak Ridge Associated Universities	Sr. Technical Specialist
	Regnier	Edward	USDOE	Sr. Physical Scientist
	Riccio	James	Public Citizen's Critical Mass Energy Project	Staff Attorney
	Rogers	A. Carter	Arizona Public Service Company	
	Russell	John	CNWRA	Director, Washington Office
	Schlump	Wolfgang	Germany	
	Schoppman	Michael	Florida Power & Light Company	Manager, Bethesda Office
	Shields	William	Defense Nuclear Facilities Safety Board	Associate General Counsel
	Shriver	Bryce	Virginia Power	Assistant Station Manager, NS&L
	Smith	David		
	Stamos	John	Senator Faircloth	Staff
	Stevens	Janice		Technical Consultant
	Sweeney	Robert	IBEX Engineering, Inc.	Principal
	Sweeney	Katie	National Mining Association	Associate General Counsel
	Thomas-Cooper	Vanessa	USDOE	Env. Protection Specialist
	Thompson	Anthony	Shaw-Pittman	
	Tipton	Tom	Nuclear Energy Institute	Vice President, Operations
	Vine	Gary	Electric Power Research Institute	Senior Washington Representative
	Vogel	Wayne	Westinghouse Electric Corporation	Radiation Safety Officer
	Walker	Roger	Texas Utilities Electric Company	Regulatory Affairs Manager

Meeting	Last Name	First Name	Affiliation	Title
	Wascom	Ronald	Louisiana DEQ	Deputy Assistant Secretary
	Weigel	Dwayne	Government Accounting Office	
	Wiblin	Claude	ATL International Inc.	
	Young	Melanie	American College of Radiology	Asst. Director, Government Relation

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