

**ORIGINAL**

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

**Title:            BRIEFING ON DECOMMISSIONING CRITERIA  
                     FOR WEST VALLEY  
                     PUBLIC MEETING**

**Location:        Rockville, Maryland**

**Date:            Tuesday, January 12, 1999**

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1 UNITED STATES OF AMERICA  
2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING ON DECOMMISSIONING CRITERIA  
5 FOR WEST VALLEY

6 \*\*\*

7 PUBLIC MEETING

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9  
10 Nuclear Regulatory Commission  
11 Room 1F-16  
12 One White Flint North  
13 11555 Rockville Pike  
14 Rockville, Maryland  
15 Tuesday, January 12, 1999  
16

17 The Commission met in open session, pursuant to  
18 notice, at 9:03 a.m., Shirley A. Jackson, Chairman,  
19 presiding.

20 COMMISSIONERS PRESENT:

21 SHIRLEY A. JACKSON, Chairman of the Commission  
22 GRETA J. DICUS, Member of the Commission  
23 EDWARD MCGAFFIGAN, JR., Member of the Commission  
24 JEFFREY S. MERRIFIELD, Member of the Commission  
25

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1 STAFF PRESENT:

2 KAREN D. CYR, General Counsel

3 ANNETTE L. VIETTI-COOK, Secretary

4

5 PRESENTERS:

6 DR. CARL PAPERIELLO, NMSS

7 DR. JOHN GREEVES, NMSS

8 MR. JACK PARROTT, NMSS

9 MR. FRANK MIRAGLIA, EDO

10 MR. JAMES TURI, DOE

11 DR. PAUL PICIULO, NYSERDA

12 MR. HAL BRODIE, NYSERDA

13 MS. BARBARA MAZUROWSKI, DOE

14 MR. WILLIAM DENNISON, DOE

15 MR. PAUL MERGES, NYSDEC

16 MR. TIM RICE, NYSDEC

17 MR. RICHARD TOBE, Valley Citizen's Task

18 Force

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

[9:03 a.m.]

1  
2  
3 CHAIRMAN JACKSON: Good morning, ladies and  
4 gentlemen. Today the NRC staff, the representatives from  
5 the Department of Energy, from the New York State Energy  
6 Research and Development Authority, which I will refer to as  
7 NYSERDA, the State Department of Environmental  
8 Conservation, and the West Valley Citizen's Task Force will  
9 provide the Commission with their views on the staff's  
10 proposed decommissioning criteria for West Valley.

11 The West Valley commercial spent fuel reprocessing  
12 plant site was licensed by the NRC, and its predecessor  
13 agency, from 1966 until 1980, when the license was suspended  
14 to execute the 1980 West Valley Demonstration Project Act.  
15 This Act authorizes the Department of Energy, in cooperation  
16 with NYSERDA, the owner of the site, and the holder of the  
17 suspended NRC license, to carry out a liquid high level  
18 waste management demonstration project that includes  
19 decommissioning of the high level waste and associated  
20 support facilities.

21 The NRC responsibilities under the Act include  
22 prescribing decontamination and decommissioning criteria for  
23 DOE. The decommissioning criteria proposed by the NRC will  
24 be a significant component of the environmental impact  
25 statement being prepared jointly by DOE and NYSERDA for

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1 decommissioning and closure of the site.

2           The staff has proposed a paper, Decommissioning  
3 Criteria for West Valley for the Commission's Consideration  
4 in SECY-98-251. This Commission paper, which was made  
5 available publicly two months ago, currently is before the  
6 Commission.

7           Because of the various interests associated with  
8 the actions proposed in the paper, the Commission has  
9 requested the stakeholder presentations we will hear this  
10 morning. The NRC staff will open with an overview of the  
11 proposed criteria. This will be followed by the other  
12 presentations that will focus on points of agreement and  
13 disagreement with the staff's proposal.

14           I understand that copies of the viewgraphs and  
15 SECY-98-251 are available at the entrances to the meeting.

16           Unless my colleagues have anything to add, Mr.  
17 Miraglia, please proceed.

18           MR. MIRAGLIA: Thank you, Madame Chairman. I  
19 would just like to start by introducing the staff and  
20 getting right into the overview of the project. On my right  
21 is Dr. Carl Paperiello, Director of Nuclear Materials Safety  
22 and Safeguards, and to my left is John Greeves, the Director  
23 of the Division of Waste Management, and to his left is Jack  
24 Parrot, the NRC's West Valley Project Manager.

25           With that, I will turn it to Carl and then we can

1 proceed with the briefing.

2 DR. PAPERIELLO: Good morning.

3 CHAIRMAN JACKSON: Good morning.

4 DR. PAPERIELLO: The NRC staff has been involved  
5 with the West Valley Demonstration Project since the  
6 enactment of the West Valley Demonstration Act in 1980. The  
7 staff recently submitted a Commission paper, SECY-98-251, to  
8 request Commission approval on proceeding with proposed  
9 decommissioning criteria for the project. The staff also  
10 noted in the paper potential alternatives that may be  
11 necessary if the preferred alternative requires long-term  
12 institutional controls.

13 The staff has proposed decommissioning criteria  
14 that are consistent with NRC precedents, that is 10 CFR Part  
15 20 and 10 CFR Part 61. Exposure to the public is limited to  
16 25 millirem per year, all pathways, and intruder doses are  
17 capped at 25 -- rather, 500 millirem a year.

18 DOE is evaluating a number of alternatives. To  
19 meet a criteria of unrestricted release, a great deal of  
20 material would have to be removed to some other location.  
21 If not other site is available, a long-term license or some  
22 form of long-term institutional controls would be needed.  
23 Such alternatives were included in the Commission paper and  
24 I expect the stakeholders present today will comment on  
25 these and other topics.

1           John Greeves will make a short presentation on the  
2 status of NRC activities and will be pleased to respond to  
3 any questions from the Commission.

4           CHAIRMAN JACKSON: Thank you.

5           DR. GREEVES: Good morning. To try and keep  
6 within time constraints, we have about seven slides that we  
7 want to walk through this morning to allow other panels  
8 adequate time. The first slide that I wanted to look at  
9 goes back into some of the history, Chairman Jackson, which  
10 you identified. The site was licensed originally by the  
11 Atomic Energy Commission in 1966 and it was owned by  
12 NYSERDA, but it was run by the Nuclear Fuel Services  
13 Company. They were the only commercial spent fuel  
14 reprocessing plant in this country.

15           The plant operated till '92 and then it shut down  
16 for some upgrades, I think this included some seismic design  
17 issues, among others, and it never restarted.

18           CHAIRMAN JACKSON: You mean till 1972?

19           DR. GREEVES: I'm sorry, maybe I misspoke. Yes.  
20 Operated until '72.

21           The project reprocessed more than 640 metric tons  
22 of spent fuel. This included then AEC type fuel and  
23 commercial fuel, and produced 600 gallons of liquid high  
24 level waste.

25           CHAIRMAN JACKSON: Six-hundred-thousand.

1 DR. GREEVES: Six-hundred-thousand gallons of high  
2 level waste.

3 CHAIRMAN JACKSON: I just wanted to let you we are  
4 paying close attention.

5 DR. GREEVES: I am a little nervous with the first  
6 slide. It will get better. Attached to the slides, you see  
7 in the back the list of all these waste management areas. I  
8 included that so you could be familiar with where these  
9 various waste management areas are. If appropriate at some  
10 point in time, we can focus on that.

11 But as we go through this, obviously, the 600,000  
12 gallons is important and that is waste management area 3.  
13 Additionally, there's a number of contaminated structures on  
14 the site, buried waste. Some spent fuel is in the ground,  
15 that is in waste management area 7, which is another  
16 important waste management area. Hulls, transuranic wastes  
17 are included, and adjacent to the project is the so-called  
18 state disposal area, and that is labeled waste management  
19 area 8.

20 All of these disposals pre-date the Part 61  
21 criteria, which is an important aspect, and I think you will  
22 hear from all parties that this is not a particularly good  
23 site for disposal. It has poor site conditions. It is  
24 located in the Northeast, a wet environment, and there's  
25 active erosional problems associated with the site which I

1 think you probably encountered in some of the background  
2 material.

3 Up to chart 2, the Act was passed in 1980 and  
4 consisted of three pages. I think in there you can note  
5 that the definition of decommissioning is not included. It  
6 has created some of the concerns raised by various  
7 stakeholders. Back in that timeframe, we didn't have a  
8 definition of decommissioning. This concept of intervention  
9 that you encounter in the international arena has developed  
10 over the last 18 years.

11 The Act directs DOE to demonstrate solidification,  
12 transport and disposal of this liquid high level waste and  
13 to decontaminate, decommission the high level waste tank and  
14 related facilities. The Act also directs DOE to enter into  
15 an agreement with NRC and we would provide informal review  
16 and consultation to the Department of Energy on the project.  
17 Essentially, what we have been doing over the last 18 years  
18 is monitoring the activities to assure that the public  
19 health and safety issues are addressed. The informal  
20 approach did not lead to amendments, SERs or EAs. The focus  
21 has been on solidifying this high level waste and the cement  
22 wastes that were separated.

23 CHAIRMAN JACKSON: Does the informal consultation  
24 with DOE apply also to how we work to establish the  
25 decommissioning criteria?

1 DR. GREEVES: In the past, the informal approach  
2 has been addressing the operations of the facility. The  
3 addressing of the decommissioning criteria has followed the  
4 track of the environmental impact statement. I think,  
5 ultimately, that the Commission will have to issue a view on  
6 the decommissioning criteria and there is a certain amount  
7 of formality associated with the EIS process, so I am not  
8 sure I am totally answering your question.

9 CHAIRMAN JACKSON: Well, can you tell me how the  
10 consultation -- I am asking you whether the informal  
11 consultation with DOE, does it or have you extended it into  
12 the EIS process vis-a-vis establishment of the  
13 decommissioning criteria or not?

14 DR. GREEVES: We have consulted with DOE on the  
15 decommissioning criteria. May of '97 we met with the  
16 Citizen's Task Force and DOE and discussed decontamination  
17 -- decommissioning criteria at that point in time, which  
18 actually pre-dated the license termination rule. There has  
19 been a number of these types of meetings with DOE and  
20 others, including the Citizen's Task Force. I would  
21 characterize those as informal. I would characterize the  
22 EIS process as a more formal process. Maybe I could get  
23 some help from OGC in terms of the formality here.

24 MS. CYR: The only thing I would note was the MOU,  
25 which we adopted quite shortly after the Act was in place,

1 contemplated at least some interchange between the  
2 Department.

3 CHAIRMAN JACKSON: Contemplated?

4 MS. CYR: Interchange between. It talks about, in  
5 the section on decontamination and decommissioning, the  
6 Department was to perform analysis of impacts and the NRC  
7 and the Department project managers were to consult on the  
8 requirements and the disposition modes to be analyzed. And  
9 then, subsequently, the Department was to provide analysis  
10 and then we would prescribe. So there was, I think,  
11 contemplated some exchange between the Department and the  
12 NRC in terms of understanding what was there and what you  
13 were trying to prescribe criteria for.

14 CHAIRMAN JACKSON: But not necessarily sitting  
15 down to work out the criteria together.

16 MS. CYR: No, I don't believe so.

17 CHAIRMAN JACKSON: Okay. Commissioner.

18 COMMISSIONER McGAFFIGAN: Madame Chairman, I just  
19 want to clarify the legal situation after the passage of the  
20 Act. At that point, prior to the Act's passing, New York  
21 State ERDA was the sole licensee at the site and it had an  
22 active license, or it had a license. After the Act, and  
23 except under our authority, presumably, the state disposal  
24 area was licensed by New York State ERDA under the state low  
25 level waste license.

1           After the Act, we suspended our license and  
2           adopted these informal procedures, right. So at the moment  
3           there is a suspended license that would come back into play  
4           once the West Valley Demonstration Project is complete. It  
5           would become an active license again, we would cease the  
6           suspension, is that correct?

7           DR. GREEVES: Yes. In the next slide I was going  
8           to get to, I will be going into some of that.

9           COMMISSIONER McGAFFIGAN: As for the New York  
10          State licensed low level waste site, that also -- did the  
11          Act treat how its status --

12          DR. GREEVES: No. Not as far as --

13          COMMISSIONER McGAFFIGAN: I guess I can ask the  
14          New York State folks later. Did they suspend their license?

15          DR. GREEVES: Not to my knowledge, no. I am going  
16          to address some of these issues as we go through the slides.

17          COMMISSIONER McGAFFIGAN: Okay.

18          DR. GREEVES: And if there are still questions, we  
19          can address them.

20          CHAIRMAN JACKSON: Let me ask you another  
21          question. In the SECY, you indicate that the Act requires  
22          NRC to prescribe criteria, and this is a little different  
23          from the Act gives NRC the authority to prescribe criteria  
24          that you have shown on the slide. How exactly do we view  
25          our role under the Act?

1 DR. GREEVES: Well, as I mentioned earlier, the  
2 Act is three pages long and the section that describes that  
3 really starts with the Secretary shall decontaminate and  
4 decommission, and then it has a series of items, and then it  
5 goes, "Any material and hardware used in connection with the  
6 project, in accordance with such requirements as the  
7 Commission may prescribe," that is what is in the Act.

8 CHAIRMAN JACKSON: Okay. So that's different than  
9 requiring the NRC to prescribe.

10 DR. GREEVES: I agree, yes.

11 CHAIRMAN JACKSON: So I just want to be clear,  
12 because the public -- this paper has been in the public  
13 domain for two months, and what you are saying today, and  
14 what you are quoting from the Act, is a little different  
15 than what is in that paper.

16 DR. GREEVES: That's why when we did the slides we  
17 put the Act gives the NRC the authority. We may prescribe.

18 CHAIRMAN JACKSON: Commissioners, do you have a  
19 comment you wanted to make?

20 COMMISSIONER McGAFFIGAN: I think what you are  
21 getting at is Congress may have intentionally used "may"  
22 rather than "shall."

23 DR. GREEVES: I am speculating what Congress  
24 intended.

25 MS. CYR: I am not familiar with the legislative

1 history on this to see whether there was some indication in  
2 there. I think it is just, I mean it could be an artifact  
3 of drafting.

4 COMMISSIONER McGAFFIGAN: Right.

5 MS. CYR: To say it that way, I mean in such  
6 requirements as the Commission may prescribe.

7 COMMISSIONER McGAFFIGAN: Congress fully may have  
8 expected us to prescribe something and that could -- that  
9 doesn't mean that the lack of the word "shall," --

10 MS. CYR: I mean I think at the time it was  
11 enacted, if you look at the memorandum of understanding that  
12 was executed by the agencies at the time, it provides that  
13 upon receipt of the Department analysis, the NRC will  
14 prescribe D and D requirements in accordance with the Act.  
15 I mean I think the agency's interpretation at the time was  
16 that the agency would in some manner prescribe requirements  
17 for this project, for the particular items that were laid  
18 out in the Act.

19 COMMISSIONER McGAFFIGAN: That was my  
20 understanding.

21 CHAIRMAN JACKSON: Well, was there accompanying  
22 Congressional language when the law was passed?

23 DR. GREEVES: I do not have that information.

24 MS. CYR: There is some legislative history, but,  
25 as I said, it doesn't --

1 CHAIRMAN JACKSON: But it doesn't speak to this  
2 distinction.

3 MS. CYR: I am not aware that it speaks to this  
4 specifically. I mean, as I said, the contemporary  
5 interpretation of the agencies, as reflected in the MOU, was  
6 that the NRC would, in fact, prescribe criteria.

7 CHAIRMAN JACKSON: Okay.

8 DR. GREEVES: I am on --

9 COMMISSIONER McGAFFIGAN: Just for the record, I  
10 have a 1988 Commission paper before me that was the last  
11 Commission paper the Commission received on this subject,  
12 and, in passing, it says, "The Act also stipulates that the  
13 high level waste tanks and other facilities at West Valley  
14 used in the West Valley Demonstration Act must be  
15 decontaminated and decommissioned in accordance with  
16 requirements prescribed by NRC."

17 So in 1988, there has not yet been an exact  
18 definition of what parts of the site will be covered by this  
19 D and D requirement. But in 1988 there was an assumption  
20 that we were going to prescribe some decommissioning for  
21 some part of the site, and then some other parts of the  
22 site, presumably, the license was going to be reactivated  
23 and we were going to license it like we would in the other  
24 site.

25 MS. CYR: It does have jurisdiction under other

1 authority with respect to that.

2 COMMISSIONER McGAFFIGAN: Right.

3 COMMISSIONER MERRIFIELD: If I may have --

4 CHAIRMAN JACKSON: Please.

5 COMMISSIONER MERRIFIELD: If the Chairman may bear  
6 with me. There were actually three Congressional committees  
7 that passed on this legislation, one in the Senate and two  
8 in the House. I have one of the reports, and this is just a  
9 quick summary of it, but the report from the House Committee  
10 on Science and Technology, which was the first of the two  
11 House committees to view on this, had a comment in relation  
12 to the issue of Section 4, which, if you will bear with me,  
13 I will read that, it is relatively brief.

14 "With the intent of encouraging comity between DOE  
15 and the other federal agencies who may have some interest in  
16 the project, this Section requires that the Secretary  
17 consult throughout the project with the Nuclear Regulatory  
18 Commission, Environmental Protection Agency, the Department  
19 of Transportation, Geological Survey, New York State, and  
20 the commercial operator of the site. However, the Committee  
21 intends the Secretary to have the ultimate decision-making  
22 authority pertaining to the timely conduct of the  
23 Demonstration Project authorized under this Act."

24 That is one of the three committees that rules on  
25 this. Now, whether that is dispositive or not, one would

1 have to do a full review of the legislative history, but I  
2 thought I would share that with the other members.

3 CHAIRMAN JACKSON: Okay.

4 DR. GREEVES: Okay. I am on slide 3, and,  
5 Commissioner McGaffigan, some of your questions about the  
6 license. The license was put in abeyance. Effectively,  
7 what happened in August of '81, DOE did submit an  
8 application consistent with the Act to take over the  
9 project, and then in September, in that same year, '81, the  
10 NRC issued a license amendment to give exclusive control of  
11 and possession of the property, which is basically 200  
12 acres, to the Department of Energy. So since that  
13 timeframe, the Department of Energy has been safely managing  
14 this particular project.

15 CHAIRMAN JACKSON: What has been NRC's role in  
16 this safe operation of the site while the license is in  
17 abeyance?

18 DR. GREEVES: The principal role over the last 18  
19 years has been for the Department of Energy to focus on  
20 solidifying the high level waste.

21 CHAIRMAN JACKSON: Now, I know activity-wise. I  
22 asked a question about our role in the safe operation.

23 DR. GREEVES: Our role was to review those  
24 activities. There was a project manager and the proposals  
25 by the Department of Energy to solidify the waste were sent

1 in and reviewed by the staff. The staff made comments on  
2 those proposals. The Region, Region I, would go up and  
3 monitor activities on the site, and go up several times a  
4 year to review things and comment to the Department of  
5 Energy. So, we were using the informal role in terms of  
6 reviewing their activities, commenting and then the Region  
7 would go up and monitor activities and give the Department  
8 feedback on what they saw.

9 CHAIRMAN JACKSON: And so if we saw something we  
10 didn't like from a safety perspective, we would be providing  
11 that feedback?

12 DR. GREEVES: Yes, we would there. I think --

13 CHAIRMAN JACKSON: So we would be in a DNFSB role?

14 DR. GREEVES: I think that could be a parallel.  
15 In the MOU that the General Counsel referred to, there is a  
16 provision for an objection. If the staff had an objection  
17 to something DOE was doing, we would identify what that was.  
18 I do not recall any point of time where that type of  
19 language came up.

20 COMMISSIONER McGAFFIGAN: Did we put anything in  
21 writing over this period as to how this review role, you  
22 know, if it was being carried out, did we commit to paper  
23 our views?

24 DR. GREEVES: Jack, try and help me out here. But  
25 my memory, again, this is going back 18 some years and the

1 project has passed hands a couple of times. But I know we  
2 reviewed documents and did submit comments in writing to the  
3 Department, but maybe Jack can help me out with some of the  
4 details.

5 MR. PARROTT: Well, that's basically right. And,  
6 also, the site monitoring visits, there would be a  
7 monitoring report similar to an inspection report issued  
8 each time.

9 CHAIRMAN JACKSON: Was there any particular  
10 follow-up once we wrote those reports, or any review of what  
11 happened as a consequence on a systematic basis?

12 MR. PARROTT: Mostly from the monitoring point of  
13 view, I think is what we would look at, and, you know, we  
14 would monitor against what commitments they had made in  
15 their various documents.

16 DR. GREEVES: Let me give you an example. They  
17 submitted a report on the stabilization of the cesium and  
18 strontium waste. We did review that and give them comments  
19 consistent with Part 61 criteria for classification and  
20 stabilization. I recall there was a lot of effort put into  
21 -- it is basically, I think, waste management area number 9,  
22 the drum cell facility.

23 DOE presented what they thought the approach to  
24 stabilizing low level waste were, what the materials were,  
25 and the staff did review that and comment on that. And the

1 Department reacted to that. I know we had a fair amount of  
2 dialogue with them about how to stabilize those types of  
3 materials. They also had some difficulty stabilizing some  
4 of those cement wastes and we worked with them on those  
5 issues.

6 CHAIRMAN JACKSON: All I am trying to say, is  
7 there a documentary trail?

8 DR. GREEVES: There is documentation on these  
9 activities.

10 CHAIRMAN JACKSON: Okay. I mean on both sides,  
11 not just that we sent the comments, but that there was a  
12 response?

13 DR. GREEVES: Yes. And if it is any different  
14 than that, I will get back to you, but that is my memory.

15 CHAIRMAN JACKSON: Okay.

16 DR. GREEVES: We talked about the license in  
17 abeyance. This is a unique position for the Commission and  
18 DOE had exclusive use of the site for the last 18 years and  
19 people have pretty much looked at this as a success path in  
20 the sense of them stabilizing the high level liquid waste.  
21 It does raise this question of the future -- what does the  
22 future hold when this project passes back to NYSERDA?

23 And there is a range of alternatives of how that  
24 could play out. It depends on the alternative selected by  
25 the Department of Energy and NYSERDA. There, I understand,

1 are negotiations that go on between DOE and NYSERDA. There  
2 is a question of, would there be government presence at the  
3 end of the day in terms of the long-term, when the site  
4 comes back under license? And there is also the question  
5 of, would there be material on-site, left on-site, or would  
6 the material be removed?

7 So that is something that really does have to be  
8 addressed and would involve negotiations between DOE,  
9 NYSERDA and coordination with NYSDEC, New York Department of  
10 Environmental Conservation. So those are things that will  
11 have to be addressed.

12 COMMISSIONER McGAFFIGAN: Can I ask a question  
13 again? The question of decommissioning, and to what part --  
14 the West Valley Demonstration Project Act talks about us  
15 setting criteria but it doesn't necessarily -- the criteria  
16 will ultimately perhaps apply to the whole site, but because  
17 once it comes back under our license, presumably it is under  
18 our criteria, just as a normal licensee, but one of the  
19 legal issues is how widespread the criteria are supposed to  
20 apply right now and how much of the site, when it returns to  
21 license, isn't covered by the Demonstration Project, is that  
22 not right?

23 DR. GREEVES: Yes. No, that is accurate, and the  
24 staff is focusing on this area holistically. The EIS covers  
25 all of these areas. You have the 200 acres, which is the

1 project premises. Adjacent to that, on the slide you have  
2 attached at the end, you will see the state disposal area, I  
3 believe that is about 16 acres. And there is another 3,000  
4 acres surrounding all of this. And EIS is looking at all of  
5 it holistically. The staff is looking at the criteria in  
6 terms of the impacts of the adjacent area and the EIS will  
7 be the vehicle that will evaluate all of these issues.

8 So it really does require DOE, NYSERDA, NYSDEC,  
9 the NRC staff, and, ultimately, the stakeholders commenting  
10 on the EIS. The EIS is the vehicle that will carry this  
11 through.

12 COMMISSIONER MERRIFIELD: Madame Chairman?

13 CHAIRMAN JACKSON: Yes, please.

14 COMMISSIONER MERRIFIELD: I want to ask the staff  
15 the extent to which we have gone back and taken a look at  
16 the legislative history to see if the proposals prepared  
17 within the context of the EIS are consistent with the  
18 underlying legislative language and committee reports  
19 associated with the West Valley Demonstration Project.

20 CHAIRMAN JACKSON: That's what I was trying to get  
21 at earlier.

22 DR. GREEVES: We can do that. I have not done  
23 that.

24 COMMISSIONER MERRIFIELD: I had an opportunity to  
25 go back and ask my staff to get me copies of the reports,

1 part of which I have already read from. As I was looking  
2 through the reports last night, as well as the language from  
3 the debate on the floor of both the Senate, which considered  
4 this legislation first, and then later on the House, which  
5 debated it, it seemed to me a flavor for this was that it  
6 really was looking at simply the high level waste,  
7 solidifying that waste as a Demonstration Project, and if  
8 there were additional -- and I will quote from the Project,  
9 quote from -- let me make sure I get the right report.

10 This is the House report. Bear with me for one  
11 moment. From the report I quoted -- I believe this is from  
12 the report I quoted earlier. "As the project will generate  
13 additional quantities of low level radioactive waste and  
14 transuranic contaminated waste, the Secretary will be  
15 expected to dispose of such waste as part of the project.  
16 However, the committee expects that this project will  
17 encompass only those portions of the site, and only those  
18 facilities directly related to the solidification  
19 activities, and not include the existing state and NRC  
20 licensed burial grounds which are presently located at the  
21 site. They would then remain under the exclusive -- these  
22 would remain under the exclusive jurisdiction and control of  
23 the licensee, and any disposal of low level waste and  
24 transuranic waste in those burial grounds would then have to  
25 comply with all applicable licensing and regulatory

1 requirements."

2 So, I mean that seems to indicate that there are  
3 -- that the committees did intend that there be boundaries  
4 on the areas that will be looked at by DOE and, ultimately,  
5 by us as we are overseeing their activities.

6 COMMISSIONER McGAFFIGAN: But I could comment.

7 CHAIRMAN JACKSON: Please.

8 COMMISSIONER McGAFFIGAN: That sounds like we have  
9 got off -- if that, that may be just report language, and  
10 there may have been further consultations with the Congress,  
11 but that would indicate that our suspending the license for  
12 the whole site, putting the whole -- our entire license in  
13 abeyance, and we will have to ask the New York people later  
14 what they did with their state disposal area -- we instantly  
15 didn't do that. We didn't focus on a small piece, we  
16 instantly suspended the entire license. Is that not  
17 correct?

18 DR. GREEVES: Yes. DOE --

19 COMMISSIONER McGAFFIGAN: So our actions, right  
20 from the get-go, may not have been consistent with that  
21 legislative history.

22 DR. GREEVES: There is logistical considerations  
23 here. DOE needed a fair amount of the site to position  
24 waste that they came up with. DOE, in fact, I understand,  
25 did dispose of some of their waste. It would be difficult

1 for DOE to manage that site in a piecemeal fashion, so at  
2 the time the amendment gave them exclusive use to the 200  
3 acres, which, my understanding is they really did need that.  
4 They needed the administrative buildings. As I think they  
5 will present and show you, they put up some tents to house  
6 the waste because some of these loose ends, the decisions  
7 weren't made. It would have been very difficult for them to  
8 kind of paint lines around areas to try and say --

9 CHAIRMAN JACKSON: Well, all of that may be true,  
10 but I think it begs one question, and that is -- to what  
11 extent, when we went through, and is it documented? And  
12 that is really what my fundamental focus is here. In  
13 putting the license in abeyance or suspending it, did we  
14 address the issues from both the Commissioners' points of  
15 view relative to whether there was difficulty in putting  
16 bright lines around parts of the site, how we would handle  
17 it relative to where our licensing authority normally would  
18 be vice the responsibility of the licensee?

19 You know, that is the fundamental -- a fundamental  
20 question for me, that's why I was asking the question of  
21 what the NRC role has been in the safe operation of the site  
22 while the license has been in abeyance, or whether we just  
23 issued the suspension for everything and didn't think about  
24 it anymore.

25 DR. GREEVES: I hope I left you with the

1 understanding that we had a role and we were participating.  
2 We interacted with DOE, we reviewed their documents. We  
3 gave them comments back on their stabilization approach, as  
4 an example, and the Region did go up and monitor the site  
5 and issue monitoring reports. So, there is documentation of  
6 that.

7 CHAIRMAN JACKSON: Included for the balance of the  
8 site that went beyond the specifics of stabilization.

9 MR. MIRAGLIA: The amendment to the license I  
10 think is what the Chairman is talking about, that  
11 evaluation.

12 CHAIRMAN JACKSON: I'm sorry. What did you say?

13 MR. MIRAGLIA: This is the activity that supported  
14 the amendment to the license suspending the authority.

15 CHAIRMAN JACKSON: That's right.

16 MR. MIRAGLIA: We will have to go back and take a  
17 look.

18 COMMISSIONER MERRIFIELD: Again, if I can make --I  
19 am not going to refer from the report, but just to make a  
20 clarification back to what Commissioner McGaffigan said.  
21 The report does seem to indicate that it can be broadened  
22 beyond those areas to assist, to facilitate in the issue of  
23 cleaning up those areas.

24 CHAIRMAN JACKSON: Right.

25 COMMISSIONER MERRIFIELD: So, you know, to the

1 extent to which there was a decision to increase it to the  
2 size of the footprint of the facility as a whole, and then  
3 for us to take the license action that we did, you know,  
4 that may not be inconsistent. I just didn't want to leave  
5 people with the impression that that was the case.

6 CHAIRMAN JACKSON: But my point is it is useful to  
7 have the documentary trail when you are moving down the road  
8 of the EIS process, that's all I am saying.

9 DR. GREEVES: Yes, I agree, and there is  
10 documentation available on these various interactions that  
11 have occurred between the staff and the Department. Just a  
12 small example, the drum cell facility I spoke about earlier,  
13 they needed the 200 acres to build that drum cell facility.  
14 As you look at it, it is, I believe waste management area 9,  
15 and it is quite removed from where the high level waste  
16 tanks are and the reprocessing facility. They needed that  
17 area to store the waste, and the staff was actively involved  
18 in that review.

19 One of the things I think all the parties do agree  
20 on is that solidifying the high level waste has been a  
21 success story. Taking that high level waste and putting it  
22 into a solid form has been a big improvement. So 85 percent  
23 of that liquid waste has been solidified. The remaining  
24 piece is the bottom, the sludge area. The tanks are in  
25 waste management area 3 and it is more difficult to address

1 the sludges, so that is going to be the next phase of the  
2 solidification process.

3 As we have discussed, there's waste stored on the  
4 site. There are tents that they have put up. We talked  
5 about the drum cell facility. And, as I mentioned earlier,  
6 I think the vehicle for pulling this together is the  
7 environmental impact statement. DOE and NYSERDA did issue a  
8 draft in '96. They identified these ten primary waste  
9 management areas, but they did not identify a preferred  
10 alternative.

11 The EIS will help us project what is project  
12 completion, how to bring this thing to closure. Most of the  
13 alternatives in that draft EIS did assume long-term control  
14 of the site, and estimates of the cost of doing these things  
15 vary from another billion dollars just to monitor activities  
16 to \$8.8 billion to dig up the entire site, and that would  
17 include both the project and the state disposal area would  
18 be included in that particular estimate.

19 We have talked about the Commission paper and the  
20 paper describes the staff's proposal for addressing and  
21 describing decommissioning criteria. I am going to comment  
22 that I think there has been more progress made since we sent  
23 this paper up in its imperfect state. You have gotten a lot  
24 of comments from the Department of Energy, NYSERDA, NYSDEC,  
25 Citizen's Task Force, others, it has created a lot of

1 dialogue that I personally have enjoyed in terms of getting  
2 that information. I think just having the meeting has  
3 advanced the project.

4 Over on page --

5 CHAIRMAN JACKSON: I think Commission Dicus --

6 COMMISSIONER DICUS: Yes, I have a question. One  
7 of the technical issues that we clearly are going to  
8 probably be faced with -- I will ask the question now. If  
9 you plan to address this later, that's fine, or if you want  
10 to address it now.

11 DR. GREEVES: Okay.

12 COMMISSIONER DICUS: The state, together with  
13 other stakeholders, have commented on the rather large  
14 change in the estimates of off-site doses if the  
15 institutional controls fail, if that is the direction you  
16 go. And given the magnitude of the change and the impact  
17 that that has on consideration of institutional controls,  
18 and, of course, the concerns that have been expressed,  
19 number one, the first question probably is -- how much  
20 confidence do you have in the numbers that we are seeing are  
21 in this change, whether you agree with it or not? And in  
22 case there is a great deal of uncertainty of dose estimates  
23 in the case of institutional control failure, is there  
24 reason to go with a third party, have a third party look at  
25 this?

1 DR. GREEVES: First, your first question was the  
2 dose estimates, do we agree with it? I think that a lot of  
3 that still needs to be crystallized. We have had  
4 interactions with the Department. There have been some  
5 moving targets. Over the last number of years, the  
6 techniques available to do dose estimation have changed. So  
7 I wouldn't say we, quote, agree with it yet. I don't think  
8 we have seen all of it. And, Jack, jump in here and help  
9 me.

10 As far as the third party question, I think with  
11 DOE, NYSERDA, NYSDEC and the NRC already involved, I am not  
12 thinking in terms of a third party. You are going to hear  
13 from NYSDEC a little later and they are quite active in this  
14 program. They have mentioned the concept of a MOU with the  
15 NRC staff and we need to take a look at that. So I think  
16 you are going to get your third party look from NYSDEC, and  
17 we will have the public comment process on the EIS.  
18 Individually, I don't see a third party concept but others  
19 may.

20 COMMISSIONER DICUS: Okay. NYSDEC, when you  
21 testify, you might want to address that.

22 DR. GREEVES: Jack, do you want to add anything on  
23 the dose analyses?

24 MR. PARROTT: Yes. We are still in the reviewing  
25 their reports on that, and I don't think they have given us

1 everything yet. But, yes, the numbers that you have seen,  
2 or that we have given you, are just the numbers that they  
3 have given us. We haven't given them any kind of an  
4 approval or anything like that yet.

5 COMMISSIONER DICUS: Thank you.

6 CHAIRMAN JACKSON: Okay.

7 DR. GREEVES: I am on chart 4 and this addresses  
8 the staff-proposed criteria. I think you need to think  
9 about this site in two pieces, one is the high level waste,  
10 which is the important piece in terms of having that removed  
11 and off-site. It is pretty much stabilized, but the  
12 assumption is that will come off-site, but everybody needs  
13 to know that with confidence. That is very important.

14 The second part is the rest of the site, and,  
15 unfortunately, it is a little bit complicated. We think of  
16 this site in three different categories. We did, in July of  
17 '97, come out with the license termination rule, so that  
18 gave the staff a good tool to use to decommission other  
19 sites and have a view on this particular site.

20 The other piece is Part 61 performance objectives.  
21 As I mentioned, the waste that is buried already predates  
22 Part 61 and lots of times a question comes up, well, how  
23 will we evaluate these things. So you really need to look  
24 back at the Part 61 performance objectives.

25 The third is the so-called incidental waste

1 criteria. This came up back in March of '93, when we were  
2 talking to DOE about the Hanford site, it's come up again,  
3 at the Savannah River site. This is the approach to  
4 removing the high level waste and when you look at that, you  
5 go back to the '93 document and you see we set up three  
6 criteria, remove as much as you can, economically and  
7 technical possible, stay within Class C type concentrations,  
8 and, again, look at the Part 61 performance objectives.

9           Essentially, when you pull these together, you  
10 come up with what I think is a consistent criteria, where we  
11 are looking at a 25 millirem all pathways criteria, a 500  
12 millirem cap with limited institutional control. All three  
13 of these criteria, the license termination rule, the Part 61  
14 performance objectives, and the incidental waste criteria  
15 that we developed all point to these types of controls; 25  
16 millirem all pathways, 500 millirem cap.

17           CHAIRMAN JACKSON: So -- I'm sorry. Go ahead.

18           COMMISSIONER McGAFFIGAN: But legally, whatever  
19 part of the site comes back under NRC license will be under  
20 these controls. So that's yet another argument for this  
21 approach that you're using here; whatever part is not  
22 decommissioned under the Demonstration Project Act and  
23 remains under NRC and presumably state license.

24           DR. GREEVES: Yes.

25           COMMISSIONER McGAFFIGAN: These are our criteria.

1 DR. GREEVES: And that's what the staff has  
2 confidence in. You gave us the decommissioning rule last  
3 year and now we have a tool to utilize. Yes, correct.

4 CHAIRMAN JACKSON: Does the intended consistency  
5 with the license termination rule extend to the ultimate  
6 criteria provisions of Part 20.1404?

7 DR. GREEVES: I would -- 1404 is which one? I  
8 want to make sure I get the --

9 MR. PARROTT: The alternative criteria.

10 DR. GREEVES: The alternative criteria, by my  
11 memory, says if you can't meet 25 millirem, you have to be  
12 under 100 millirem, and come back and talk to the  
13 Commission, consult with EPA -- Karen is maybe looking this  
14 up. But 1404, I think, is a provision that addresses  
15 alternatives between 25 millirem and 100 millirem in terms  
16 of doses to the public.

17 Karen, can you help me out, if I've got that  
18 wrong?

19 MS. CYR: I think that's right.

20 MR. PARROTT: It's 100 millirem per year.

21 CHAIRMAN JACKSON: I didn't ask for a recitation  
22 of 1404.

23 DR. GREEVES: I'm sorry.

24 CHAIRMAN JACKSON: But whether, in fact, the  
25 consistency with the license termination rule extended to

1 the alternate criteria in 1404.

2 DR. GREEVES: I'd say yes. Kind of getting down  
3 to what the issue is, the issue -- an issue at this site is  
4 a hypothetical intruder. You've read some concerns raised  
5 by parties in terms of the erosion issues at this particular  
6 site. There are stream beds close to these disposal areas.  
7 Both the project and the state disposal area, and I think  
8 most of the parties agree with the concept of shrinking the  
9 footprint and identifying what the areas of concern are at  
10 that point.

11 You're going to hear some more about that from the  
12 other panels.

13 So we feel that the process is comprehensive and  
14 covers the project and the remainder of the site. We will  
15 be looking at the state disposal area in terms of the EIS  
16 project. In fact, there is some project contamination that  
17 goes beyond the 200 acres that we will have to be  
18 addressing.

19 As far as the proposed process, the staff thinks  
20 that the EIS process is efficient. It will help us  
21 prescribe the criteria based on the EIS input. NRC will be  
22 able to consider public comments during that process. It  
23 will conserve government resources and could eliminate  
24 duplication, where we would have to go off and do our own  
25 EIS process.

1           The paper recognized that the criteria that we  
2 just talked about in some cases may not be viable,  
3 particularly the state disposal area and the so-called NDA  
4 are areas that would be problematic, and the staff has  
5 looked at other instances where these types of things have  
6 been dealt with.

7           The Maxi Flats site in Kentucky also has this kind  
8 of a problem and there was a record of decision there that  
9 indicates perpetual institutional control. DOE has a number  
10 of other sites where they're addressing these types of  
11 issues, including the Idaho site, the Savannah River site,  
12 and there are a number of RCRA landfills out there that also  
13 would have to address these types of issues.

14           CHAIRMAN JACKSON: Let me ask you a couple of  
15 questions, Mr. Greeves. The Coalition on West Valley  
16 Nuclear Waste has submitted a statement of comments on the  
17 SECY paper and they have a concern that NRC is improperly  
18 redefining the term "decommissioning" by including waste  
19 disposal in the proposal.

20           Could you comment? Do you have a comment?

21           DR. GREEVES: First, I don't think the Act defines  
22 decommissioning itself. It's been unfortunate in terms of  
23 some of the communication associated with these definitions.  
24 Remember, back in the 1980 time-frame, where people were,  
25 there was no definition of decommissioning. In fact, there

1 was no Part 61 even at that point in time.

2 The reality is this site contains buildings,  
3 equipment, et cetera, that needs to be decon'd,  
4 decommissioned. This site also contains burials. This site  
5 also contains the state disposal area. It also contains  
6 high level waste liquids. All of those factors force you to  
7 look at the three things I addressed earlier; license  
8 termination regulation, which helps address part of that.

9 Part 61 for burials, it helps you address part of  
10 it, and then the incidental waste criteria.

11 I feel forced to draw on all three of these and,  
12 unfortunately, it's been a little bit difficult to explain  
13 it to some other parties how this works.

14 So I hope I'm answering your question. There's  
15 more issues at this site than just a clean decommissioning  
16 criteria. If you were building a new project, if DOE just  
17 went out there and built a new building, theoretically, all  
18 they would have to have done was decon/decommission that  
19 building, but they didn't do that. They took over a whole  
20 building.

21 CHAIRMAN JACKSON: Let me complicate it further  
22 for you. Do the EPA standards and 40 CFR 191 for disposal  
23 of spent fuel apply to the spent fuel and other waste in the  
24 NRC licensed disposal area?

25 DR. GREEVES: My answer is I think they do and

1 maybe Karen wants to add to that. I think that's an issue  
2 that we've recognized.

3 CHAIRMAN JACKSON: Karen, do you have any comments  
4 you want to make?

5 MS. CYR: In the NRC license, there is.

6 CHAIRMAN JACKSON: And then my last question is,  
7 does the staff intend to apply, in the license held by  
8 NYSERDA, the same criteria it prescribes to DOE?

9 DR. GREEVES: Yes. That's my intention. We're  
10 trying to look at this holistically. We can save some  
11 government resources by doing one EIS, not two, and it needs  
12 to be a consistent set of criteria that lives beyond that.  
13 That's why the staff has pointed to things we're doing for  
14 virtually all the other licenses that we encounter.

15 This one is a little unique. It includes an  
16 incidental waste criteria aspect.

17 COMMISSIONER DICUS: Following up on one of the  
18 Chairman's earlier questions, on this confusion that may  
19 exist particularly with some stakeholders on D&D versus  
20 disposal. Would it be clearer if we are very -- we're very  
21 clear on talking about decommissioning and decontamination  
22 separately from disposal?

23 DR. GREEVES: Yes. I think we could have --

24 COMMISSIONER DICUS: I think we're putting them  
25 together and perhaps we could separate them.

1 DR. GREEVES: We could have done a better job in  
2 taking it up in that context. Keep in mind that for 17 of  
3 those 18 years, there was no decommissioning criteria. In  
4 fact, the substantive meeting we had with the Citizens Task  
5 Force occurred before you finalized the decommissioning  
6 criteria.

7 We were able to go up. You did release the paper.  
8 We gave them the paper and so we discussed what, at that  
9 time, was a proposed decommissioning criteria.

10 COMMISSIONER DICUS: Understood. But now that we  
11 have it, perhaps this is the time to make that distinction.

12 CHAIRMAN JACKSON: Did you have a question?

13 COMMISSIONER McGAFFIGAN: I just wanted to follow  
14 up. One of the things we need in dealing with this paper,  
15 and we've had some discussions with the staff previously, is  
16 context and you've mentioned Maxi Flats, which is being  
17 handled under SuperFund, with the State of Kentucky, and you  
18 said that they basically envision perpetual institutional  
19 controls there.

20 Are the doses, if institutional controls fail at  
21 Maxi Flats, similar to the sort of doses we see in Table 3  
22 of your paper, where it's instant death or relatively rapid  
23 death, thousands or tends of thousands of rem?

24 DR. GREEVES: We have tried to pursue that and  
25 verbally we've been told that the waste at Maxi Flats would

1 be lethal if you camped out on it, intruded on top of it.  
2 So I think that's a partial answer. We're still trying to  
3 get more information on that.

4 But if you assume somebody goes to Maxi Flats and  
5 encounters the waste, stays there, it's -- verbally, we've  
6 been told that it's a lethal combination.

7 COMMISSIONER McGAFFIGAN: One of the interesting  
8 things about this, interesting, is that institutional  
9 controls, as I understand it, are going to be widely used in  
10 the DOE system. Words like imperpetuity are used commonly  
11 in referring to sites like the Savannah River site or Maxi  
12 Flats or whatever, Hanford.

13 And there was a recent consent agreement between  
14 where I think NRDC was the lead that will be studying it.  
15 It, I think, gives them six-and-a-quarter million dollars  
16 for, among other things, studying how long-term  
17 institutional controls will be applied at DOE sites after  
18 DOE does whatever cleanup it can do that's technically  
19 feasible.

20 And we just have -- but if we're the lead, one of  
21 the interesting things, and this is probably more for the  
22 DOE witness, is the methodology we're using at this site, it  
23 would be interesting to see if it's the same methodology  
24 we're going to use across the system, whether it's us  
25 regulating or EPA regulating, as it does at Maxi Flats.

1 Then I think it will also have an impact -- the staff has  
2 tried to learn about Doumreay, Scotland, and there is a  
3 reprocessing plant there. It's still operating, but they're  
4 going to -- it's basically mostly existing to decommission  
5 itself.

6 The interesting thing there is they have a number,  
7 seven billion dollars, some say it would be 17 billion, but  
8 as best we can tell, they don't have criteria yet and they  
9 do not have the methodology for guesstimating intruder  
10 doses, if institutional controls failed. But I assume the  
11 British and the Scots will have the same set of issues  
12 before them, but we're the lead here, in some sense, in  
13 trying to deal with these -- you know, how effective  
14 institutional controls are going to be over a long period of  
15 time, whether it's under license with us.

16 Because our rule doesn't define decommissioning  
17 either, I don't think. We have a license termination rule.  
18 If you want your license to terminate, this is what you have  
19 to achieve. To do that, you have to decontaminate and  
20 decommission, but what our rule says is if you want to  
21 terminate your license, this is what you have to do.

22 And we have an active -- we have an inactive  
23 license that will come back into, in some sense, this  
24 debate. We have established what the criteria -- in 1997,  
25 we established what the criteria at this site would be once

1 it's returned to us, once the Demonstration Project Act  
2 ends, whatever part of it applies. Now we're dealing with  
3 the part that doesn't return to us.

4 DR. GREEVES: Okay. Up to page five. As the  
5 paper indicates, the staff noted some options for long-term  
6 control. Because the DEIS did evaluate the alternatives  
7 that assume unlimited institutional control period, we felt  
8 that a level of discussion should be provided regarding  
9 options for that.

10 We identified three, the first of which is a  
11 long-term license.

12 CHAIRMAN JACKSON: Who would be the licensee in  
13 that instance?

14 DR. GREEVES: Can we give you some parallels? One  
15 long-term license that does exist now is the uranium  
16 recovery sites. DOE has a general license for all of those  
17 sites that have been turned over to them. So we have a  
18 precedent in one sense of a general license for the  
19 Department of Energy.

20 The license termination rule itself recognized  
21 that there might be some cases where failures of  
22 institutional control would become a problem, and it  
23 suggested a remedy to that would be to keep the site under a  
24 license. I don't think it said who, but obviously for that  
25 --

1           CHAIRMAN JACKSON: But do you have a thought in  
2 this particular instance?

3           DR. GREEVES: The thought is it would have -- my  
4 thought is that it would have to be either the Federal  
5 Government or state government.

6           CHAIRMAN JACKSON: So understand government then.

7           DR. GREEVES: Yes, under government control. I  
8 think as complicated as this site is, there needs to be a  
9 certain amount of negotiation on these details between DOE  
10 and NYSERDA, and among the other responsible parties in  
11 terms of their comments, and I understand those negotiations  
12 are ongoing. Maybe you'll hear more about them.

13           The second alternative would be some form of new  
14 legislative authority to give NRC authority similar to the  
15 authority that the Environmental Protection Agency does have  
16 at this time to utilize perpetual institutional controls.

17           DOE included similar language in their proposed  
18 order 10 CFR 834, which we commented on.

19           The last item, just for completeness, under the  
20 direction-setting issues, the Commission identified an  
21 approach where, as a last resort, we would turn such sites  
22 over to the CERCLA process, where EPA would take them over,  
23 and they do have authority for long-term control provisions.

24           If anything like that were to be approved, it  
25 would have to be approved by the Commission and EPA would

1 have to agree that there would be a higher probability of  
2 success for such an approach and it is basically the Maxi  
3 Flats type approach.

4 COMMISSIONER DICUS: Given the situation, any of  
5 these situations that you've raised here, particularly a  
6 long-term license of either a Federal or state government,  
7 has any thought been given, on the NRC side, as to what role  
8 you would see for state and local communities or governments  
9 to monitor the status of the site if we go forward in some  
10 sort of long-term issue?

11 DR. GREEVES: As we all know, the license  
12 termination rule sets up a process to address that question,  
13 where people would come in and comment on the long-term  
14 controls, including the state and the local government  
15 process.

16 So I think these are things that would play out in  
17 time. And as I said, I've talked to NYSDEC and they are  
18 quite active in this program and they talked about  
19 developing an MOU, which some of these things might be  
20 addressed in.

21 The process for describing the criteria, the staff  
22 view is that we would communicate to the Department of  
23 Energy and NYSERDA this proposed criteria. It would end up  
24 being an appendix in this supplemental EIS that people could  
25 comment on. DOE and NYSERDA could factor the proposed

1 criteria into their development of the supplemental EIS and  
2 identify their preferred alternative. This is a key.

3 As a cooperating agency, we will provide support  
4 in this process. We'll be cooperating with the Department  
5 of -- NYSDEC and the -- this will require us to talk about  
6 the SDA versus the 200 acres I mentioned earlier and the  
7 3,000 acres which envelope these sites. All of those are  
8 going to have to be taken into account. There are some  
9 loose ends that do require further discussion.

10 The supplemental EIS would go out for public  
11 comment and then we get the opportunity to review those  
12 comments on the preferred alternative.

13 COMMISSIONER DICUS: Before you leave that slide,  
14 I think that NYSDEC has suggested a cooperative agreement  
15 with the NRC to go forward in the long term. Do you have  
16 any reaction to that?

17 DR. GREEVES: I have no problem with that. I'd  
18 actively pursue that with Paul Merges. We've talked on the  
19 phone about it and we've done it elsewhere. So I think  
20 that's something we should follow up on and talk to Paul  
21 about.

22 COMMISSIONER DICUS: The other thing I want to  
23 bring up, I think, also, NYSDEC has a soil cleanup standard  
24 of ten millirem per year. Do you envision that as a problem  
25 as we go forward with any kind of criteria?

1 DR. GREEVES: From my memory, we would license the  
2 site according to our license termination rule. I think a  
3 state can be more restrictive if they choose to.

4 I think we just need to make all that transparent  
5 in the EIS process, because NYSERDA is going to want to know  
6 what is the criteria and if there is a more restrictive  
7 state criteria, they need to know that.

8 The last slide I want to address is seven and it  
9 really addresses the question of when. There's been some  
10 controversy over this. The process prescribing this  
11 criteria will follow the EIS and in thinking about this, we  
12 looked at three options in terms of finalizing the criteria  
13 in relationship to the EIS, the first of which would be if  
14 it was finalized before the DOE NYSERDA EIS and a record of  
15 decision were issued, that's one way to do it and that  
16 would, I think, cause some problems.

17 The problems would be that we would likely have to  
18 do our own EIS to finalize that particular decision. I know  
19 the Citizens Task Force prefers doing it early and, also,  
20 the West Valley Coalition. So that's one of the  
21 time-frames.

22 COMMISSIONER DICUS: Is that the only down side to  
23 doing it earlier in the process, is that we might have to do  
24 our own EIS, or are there other down sides, as well?

25 DR. GREEVES: If there's others, I would have to

1 get back to you on them, but I think that is the principal  
2 down side. The staff was looking at the EIS process as a  
3 holistic process, where we could use it, say, our government  
4 resources for developing an independent EIS, but we've done  
5 that elsewhere.

6 COMMISSIONER McGAFFIGAN: Do we prescribe these  
7 criteria by rule? I mean, would this be -- whatever time we  
8 do it, is this going to be a rule-making, with a proposed  
9 rule in which people comment, the public and DOE, et cetera,  
10 and then a final rule? I mean, a normal rule-making  
11 process. Is that ambiguous under the Act or what?

12 DR. GREEVES: I think I'd like to ask Karen to  
13 help on that.

14 MS. CYR: I think it's ambiguous under the Act. I  
15 mean, I think normally an agency acts by rule-making or  
16 adjudication. In this case, rule-making would seem to be  
17 the most appropriate. If you're building on the existing  
18 Part 20 and you have already, in effect, done an EIS for  
19 that, so what you might be looking at is something in terms  
20 of taking advantage of the data that's already out there.

21 As John has suggested, depending on the timing of  
22 that, to put out how, in any modified form, those criteria  
23 that are already there in Part 20, would apply particularly  
24 to this decision and you could do it in a rule-making  
25 context.

1           COMMISSIONER MCGAFFIGAN: So you wouldn't have to  
2 do an EIS to go in that direction.

3           MS. CYR: Because we've already done a full EIS on  
4 the Part 20 criteria, it specifically does not apply to West  
5 Valley, so you would have to say is there some -- what is  
6 the difference or what would I have to do to contemplate  
7 those criteria, from an EIS standpoint, would -- if I would  
8 now apply them. So you would have to look at the difference  
9 and I think one of the parties suggested that you already  
10 have -- in the draft EIS, you have a lot of data available.

11           So the question is could you draw on that data,  
12 when could you draw on that data, or you could draw on the  
13 final EIS in terms of -- we're in the process of working  
14 with them now as a cooperating agency to do that. I think  
15 there may be some flexibility in the timing of how you might  
16 do that.

17           COMMISSIONER DICUS: That might be worthwhile  
18 looking into if this is the primary down side that we have  
19 with this issue and it seems so very important to several of  
20 the stakeholders to look at that possibility.

21           CHAIRMAN JACKSON: Also, it seems that from what  
22 we've been describing, it's not a pure D&D rule, license  
23 termination rule criteria that are being applied. Mr.  
24 Greeves has already talked about this kind of blended  
25 approach in terms of what criteria apply to what. So it's

1 not as clean as one might like.

2 MS. CYR: But I think that's what has driven the  
3 staff, because it is a blended approach. You're trying to  
4 pull together disparate elements and a lot of different  
5 things, and so how --

6 CHAIRMAN JACKSON: No, no.

7 MS. CYR: And that's most easily reflected in the  
8 EIS process they have going and that's why they're looking  
9 to that process.

10 CHAIRMAN JACKSON: That's relating to the  
11 Commissioner's comment about the issue of whether the need  
12 for us to do our own EIS is driving a decision as to when  
13 the final criteria would be specified here.

14 COMMISSIONER DICUS: Right.

15 CHAIRMAN JACKSON: But what I'm trying to say is  
16 that the issue of how complicated that is is a -- as you've  
17 just pointed out, it's a question of how much of the license  
18 termination criteria can be carried over. But I'm saying  
19 the case has already been made that it's more than the  
20 license termination criteria that are being applied here,  
21 that you're actually blending a number of things.

22 Therefore, it wouldn't be so easy to just carry  
23 over, to say that the --

24 MS. CYR: I think that's been the staff's concern,  
25 because --

1           CHAIRMAN JACKSON: Right. That the EIS that dealt  
2 with the license termination rule, how can you say it -- I  
3 mean, it can't cover it if you're doing --

4           MR. MIRAGLIN: Until that criteria is clearly  
5 defined, the steps to go to closure for the facility is  
6 delayed. I mean, the alternatives would have to be weighed  
7 to make sure that that criteria is clearly understood and  
8 goes through the process.

9           DR. GREEVES: It could cause a delay.

10          MR. MIRAGLIN: It could cause one in terms of --

11          CHAIRMAN JACKSON: How much of a delay?

12          MR. MIRAGLIN: That needs to be looked at.

13          CHAIRMAN JACKSON: It's not clear where it's all  
14 going to go. I mean, the NRC is involved at Hanford. One  
15 could argue that there are some parallelisms here and when,  
16 in such a history of involvement with these sorts of things,  
17 this one is very specific under a law, specified law, when  
18 it's worthwhile to go through an EIS process that might  
19 provide a basis for dealing with these things more  
20 generically.

21          COMMISSIONER McGAFFIGAN: Madam Chairman, could I  
22 ask?

23          CHAIRMAN JACKSON: Please.

24          COMMISSIONER McGAFFIGAN: One of the issues that  
25 strikes me, I just -- is there a resource difference for the

1 staff depending on these various options? Because this is  
2 one of these areas where our current licensees, very  
3 begrudgingly, pay fees to cover these sorts of costs when  
4 they had nothing to do with the generation of the staff  
5 activity and it was -- and this is stuff that clearly should  
6 be outside the fee base, in my mind.

7 But if this becomes a major drain on resources,  
8 we've got a lot of other priorities and I don't know whether  
9 there is anything in the Act that would preclude DOE helping  
10 us by shifting money this way, even though we can't charge  
11 them fees or anybody fees while the license is in abeyance.

12 I'm looking at Karen to see --

13 CHAIRMAN JACKSON: You mean whether there could be  
14 some kind of reimbursable --

15 COMMISSIONER McGAFFIGAN: Like we have on MOX or  
16 some of the other DOE activities, Hanford -- well, not  
17 Hanford at the moment, but at one point, we had --

18 CHAIRMAN JACKSON: Right. Hanford is on the  
19 general fund.

20 MS. CYR: I can't answer that. I think they  
21 receive a specific appropriation for this. Whether there's  
22 -- whether this is something we have to do ourselves and  
23 we're obligated to do it under the statute, there is a  
24 question of whether we could -- because it is something we  
25 are obligated to do, whether we do it on behalf of DOE or

1 whether, in fact, it would be appropriate for DOE -- I would  
2 question whether it would be appropriate for DOE to enforce  
3 in those circumstances, because it is an obligation.

4 COMMISSIONER MCGAFFIGAN: So this is not one of  
5 these things like Hanford that belongs in the general fund  
6 if they're going to get appropriated.

7 MS. CYR: Yes.

8 COMMISSIONER MCGAFFIGAN: Okay.

9 COMMISSIONER MERRIFIELD: Madam Chairman, I had  
10 sort of two comments that came out of this. When I read  
11 this particular slide, talking about the three options for  
12 this, the thing that raised a concern, in my mind, is that  
13 there is a disconnect between that slide and between the  
14 paper.

15 Really, in the paper, the Commission is being  
16 asked to endorse what is the recommended option without  
17 having gotten a full analysis or even a description of what  
18 the three options were.

19 CHAIRMAN JACKSON: Exactly, that's right.

20 COMMISSIONER MERRIFIELD: And that bothered me,  
21 because I think this conversation brings out that there is  
22 more information for us to look at.

23 We as a Commission may fully decide you gave us  
24 the right option and we agree with you, but I don't feel as  
25 if I've had the opportunity to weigh that.

1 CHAIRMAN JACKSON: Exactly, that's right.

2 COMMISSIONER MERRIFIELD: And I think we ought to  
3 go back and look at that.

4 CHAIRMAN JACKSON: So maybe you need to, in the  
5 next couple of days, send the supplement to the Commission  
6 relative to the options and addressing the various questions  
7 that have come up of when in the process one should  
8 prescribe the criteria and what are the considerations that  
9 go into that, both from a resource expenditure point of  
10 view, as well as the public policy point of view.

11 COMMISSIONER MERRIFIELD: Right. And the  
12 associated question, this was brought out by some of the  
13 testimony that we received, looking, by analogy, at what EPA  
14 does, generally, they have a set of cleanup criteria,  
15 whether it's DOE or other parties doing an EIS have to look  
16 to those, analyze those to see whether they can get them,  
17 and ultimately you're at the point where you have a -- where  
18 you made a determination we're going to meet those and this  
19 is the way in which we're going to do it or we're going to  
20 have to waive those criteria and here is our other way of  
21 doing it.

22 The process that we've created here is not  
23 consistent with that and it does -- I mean, there are some  
24 folks who we'll hear from today and we'll question on the  
25 degree to which we're later on in the process.

1           There is some clarity you can get by saying up  
2 front, you know, here are your rules, analyzing them through  
3 the EIS process, and then, after you do that and you decide  
4 you can't meet that, for whatever reason, unreasonably  
5 costly or whatever, then you go with the --

6           COMMISSIONER MCGAFFIGAN: It strikes me that that  
7 may be what the staff is asking us to do. It may be more  
8 analogous to the EPA process. I think they're asking us to  
9 make a tentative decision as to what goes into the  
10 supplemental EIS at this point, what we believe the criteria  
11 should be, but then there's going to be public comment  
12 through the EIS process and presumably part of the comment  
13 will be about the ability to meet the criteria.

14           So they may actually -- I'll let them talk, but  
15 they may actually be trying to do something somewhat  
16 analogous. I regard any decision the Commission makes on  
17 this paper and any supplements to it as a tentative decision  
18 that we would then revisit in light of either this EIS  
19 process in which we're a cooperating agency or some other  
20 process we decide to undertake on our own.

21           COMMISSIONER MERRIFIELD: There's a little bit of  
22 a nuance difference, though, and that is with EPA, you have  
23 a standard.

24           COMMISSIONER MCGAFFIGAN: Right.

25           COMMISSIONER MERRIFIELD: You go through it and

1 you say can you meet the standard or not. And if you can't  
2 meet the standard, then you come up with alternatives.

3 COMMISSIONER MCGAFFIGAN: Right.

4 COMMISSIONER MERRIFIELD: Whereas, what we're  
5 doing is we're going through the -- we're saying, well,  
6 tentatively, this is what we do; you go through the EIS and  
7 you determine, gee, well, we can't do that, so this is what  
8 we're going to do instead.

9 CHAIRMAN JACKSON: Right. It sounds like it's  
10 situational ethics as opposed to --

11 DR. GREEVES: It's even more complicated than  
12 that. I'm not sure EPA has a standard for decommissioning.

13 COMMISSIONER MERRIFIELD: No, I'm not talking  
14 about -- I'm talking about generally the way -- SuperFund or  
15 --

16 DR. GREEVES: They do a parallel type of process.

17 COMMISSIONER MERRIFIELD: I'm using it by analogy.

18 CHAIRMAN JACKSON: Also, again, this is relevant  
19 and as you bring forward this supplement, I mean, I think  
20 you have to play it off against the fact that you are using  
21 blended criteria and to what extent that would weigh into  
22 whether one should have some proposed, and be up front about  
23 it, criteria and how that would play off against whether we  
24 go through this EIS process or do our own, as well as the  
25 resource questions.

1           But also on whether and where in the process the  
2 NRC would make the determination on whether to include a  
3 provision for long-term institutional controls, unless that  
4 would naturally fall out of the considerations, because that  
5 also seems to be at the heart of a lot of what we're being  
6 faced with here.

7           DR. GREEVES: Yes.

8           CHAIRMAN JACKSON: Okay. Anything else?

9           DR. GREEVES: If you don't have anymore questions,  
10 I think we've probably talked through the three options.

11           CHAIRMAN JACKSON: We'll look for the paper within  
12 the next week. I'd like to call forward -- thank you very  
13 much -- the Department of Energy and NYSERDA, the New York  
14 State Energy Research and Development Authority.

15           Good morning.

16           MS. MAZUROWSKI: Good morning, Chairman Jackson  
17 and Commissioners. I am Barbara Mazurowski of the United  
18 States Department of Energy and DOE Director of the West  
19 Valley Demonstration Project.

20           I would also like to introduce Mr. James Turi,  
21 Associate Deputy Assistant Secretary for Waste Management,  
22 and Mr. William Dennison, Assistant General Counsel for  
23 Environmental Management.

24           The West Valley Demonstration Project is one of  
25 five sites that reports to the Ohio Field Office, which is

1 managed by Leah Dever, who signed our letter. The project  
2 is part of EM-30, the Department's waste management program.

3 I am pleased to have the opportunity to present  
4 the Department's response to the Commission staff's proposed  
5 decommissioning criteria for West Valley and answer any  
6 questions that you may have.

7 However, before I discuss any specific topics  
8 regarding the Commission paper, I feel that it is important  
9 for me to note three key points regarding DOE's role at the  
10 West Valley Demonstration Project.

11 First, protection of worker and public health and  
12 safety and the environment has and always will be paramount  
13 in DOE's decision-making. Second, we are encouraged by  
14 proposed options for decommissioning, the criteria presented  
15 in the Commission paper. And, third, the West Valley  
16 Demonstration Project is unique, both technically and  
17 politically.

18 The success DOE has achieved in the cleanup and  
19 management of radioactive waste at the site has been due to  
20 cooperation with many stakeholders. We are dedicated to  
21 continuing the progress toward project completion and to  
22 working with all parties to overcome issues that must be  
23 resolved.

24 Now, as I turn to the proposed Commission  
25 approach, I want to give a brief overview of the topics I'm

1 going to cover. I will start by reviewing the West Valley  
2 Demonstration Project Act and how the Act defines DOE's  
3 responsibilities, agreements and limitations.

4 Next, I will discuss DOE's response to the  
5 Commission's approach for describing  
6 decontamination/decommissioning criteria for the project.  
7 After that, I will review how this approach fits into the  
8 overall project completion process. Finally, I will  
9 conclude by summarizing the major points the Department  
10 would like to make and, of course, I'll answer any questions  
11 in between that you may have. Otherwise, I will just  
12 proceed with my prepared statement.

13 CHAIRMAN JACKSON: Please.

14 MS. MAZUROWSKI: The West Valley Demonstration  
15 Project Act was passed into law in 1980 and this  
16 Congressional Act put in place the framework and the steps  
17 necessary for completing the project. In Section 2 of the  
18 Act, DOE is assigned five major responsibilities; to develop  
19 the containers for vitrified high level waste, to solidify  
20 liquid high level waste, to transport the vitrified high  
21 level waste to a Federal repository, to dispose of low level  
22 and transuranic waste produced by the project, and to  
23 decontaminate and decommission facilities used in accordance  
24 with such requirements as the Commission may prescribe.

25 Section 2 --

1 CHAIRMAN JACKSON: Tell me something.

2 MS. MAZUROWSKI: Yes.

3 CHAIRMAN JACKSON: Why did you underline and  
4 highlight and italicize "may"?

5 MS. MAZUROWSKI: You're looking at my brief?

6 CHAIRMAN JACKSON: Right, the slide.

7 MS MAZUROWSKI: I believe that that is the  
8 language that is included in the Act.

9 CHAIRMAN JACKSON: But is there a particular  
10 reason that you highlighted it for us?

11 MS. MAZUROWSKI: It goes back to the discussion,  
12 I'm sure you heard, when we were talking about what's  
13 required or may, must we or can we and so forth, and if any  
14 part of DOE wanted -- give us your opinion of what you  
15 thought about it is.

16 COMMISSIONER DICUS: Because this is you have  
17 "may" and have it underlined. So it seemed to emphasize it.

18 MS. MAZUROWSKI: Yes. I believe that I am just  
19 quoting the Act here and that that has to be --

20 CHAIRMAN JACKSON: So this is a faithful lifting  
21 from the printed page.

22 MS. MAZUROWSKI: Yes, it is.

23 CHAIRMAN JACKSON: Okay.

24 COMMISSIONER McGAFFIGAN: I'm not sure on the  
25 printed page "may" is underlined or italicized.

1 MS. MAZUROWSKI: I don't think it is.

2 COMMISSIONER McGAFFIGAN: So the lawyer might want  
3 to help. Is this "may" rather than "shall"? You're saying  
4 that was a conscious act of Congress?

5 MR. DENNISON: What I was speaking up to say was  
6 that the italicization or underscoring caught me by  
7 surprise, as well. I was wondering to myself why this was  
8 italicized before you asked the question.

9 CHAIRMAN JACKSON: So nobody is taking ownership  
10 here.

11 MR. DENNISON: It was not, to my knowledge, done  
12 because at least the DOE lawyers thought there was some  
13 great significance to this.

14 COMMISSIONER DICUS: So the slide gremlins got  
15 hold of this.

16 MR. TURI: I worked -- I was a Headquarters  
17 Program Manager from West Valley from '79 to about '85 and  
18 there was a bout of discussion and passing legislation,  
19 should it be a "shall" or whatever. The words "may" were  
20 specifically included and they wanted NRC involved because  
21 they felt that they were an independent agency and could do  
22 the checks and balances.

23 There was concern by some, once DOE got on site  
24 for the cleanup program, that some may ask us to clean up to  
25 maybe more stringent standards than would be appropriate,

1 and NRC was viewed as an independent body to make that  
2 judgment.

3 COMMISSIONER DICUS: Fair statement.

4 CHAIRMAN JACKSON: Okay.

5 MS. MAZUROWSKI: Section 2 requires DOE to enter  
6 into two major agreements. One agreement is with the State  
7 of New York and the other is with the Nuclear Regulatory  
8 Commission, and I will discuss some of the details of these  
9 agreements.

10 Section 5 places restriction on what DOE is  
11 allowed to do with respect to the project. The important  
12 limitations are that the Act prohibits the Federal  
13 Government for taking title to the high level waste or to  
14 any portion of the Western New York Nuclear Service Center.

15 The Act also doesn't apply and can't be extended  
16 to any facility or property at the center which is not used  
17 in conducting the project.

18 CHAIRMAN JACKSON: Let me ask you a question about  
19 that. I mean, what is DOE's view on the scope of the EIS  
20 and the criteria and long-term control alternatives in the  
21 staff's paper to the Commission? That is, you know, that  
22 they include both DOE completion of the project and  
23 NYSERDA's closure of the site.

24 MS. MAZUROWSKI: The EIS does address the site.

25 CHAIRMAN JACKSON: And you think that's

1 appropriate.

2 MS. MAZUROWSKI: We do think that that is  
3 appropriate. The site should be addressed holistically, as  
4 Mr. Greeves pointed out. DOE concurs with that.

5 CHAIRMAN JACKSON: What about the long-term  
6 control alternatives?

7 MS. MAZUROWSKI: It's DOE's goal to meet license  
8 termination rule, to the extent possible. There may be some  
9 facilities that will be required to be left in place. For  
10 those facilities that will be left in place, institutional  
11 control will be required.

12 CHAIRMAN JACKSON: Who should provide those  
13 institutional controls?

14 MS. MAZUROWSKI: How those institutional controls  
15 are provided is a matter that still has to be negotiated  
16 between DOE and NYSERDA.

17 CHAIRMAN McGAFFIGAN: Could I ask a question? The  
18 sentence you have from the Act is interesting because if you  
19 -- could you be -- Mr. Greeves earlier said either DOE or  
20 NYSERDA or New York State would be the licensee in the long  
21 run.

22 Does that sentence, the first sentence cited under  
23 Section 5, constrain you? If you cannot acquire title to  
24 the center or any portion thereof, is it the view that that  
25 only applies during the West Valley Demonstration Project

1 Act and doesn't apply after it or would you need specific  
2 authorization from Congress to be able to -- if the  
3 negotiation between New York and DOE were that DOE was  
4 better placed to be the long-term institutional controller?

5 Would you have to go to Congress to get relief  
6 from this sentence?

7 MS. MAZUROWSKI: We don't believe that we need any  
8 further legislature to complete our obligations under the  
9 Act. How institutional controls would be provided would be,  
10 as was already discussed here, either by a government  
11 presence on site or perhaps providing moneys or funding for  
12 continuing care, long-term care.

13 CHAIRMAN JACKSON: So you feel that the question  
14 of the long-term alternatives -- long-term control  
15 alternatives is a negotiable item --

16 MS. MAZUROWSKI: Yes.

17 CHAIRMAN JACKSON: -- between DOE and NYSERDA.

18 MS. MAZUROWSKI: Yes, we do.

19 MR. TURI: As well as the NRC, because I think you  
20 have to play a role in that.

21 COMMISSIONER McGAFFIGAN: But can you be the --  
22 can DOE, under this sentence -- it says it doesn't authorize  
23 you to acquire title to the center or any portion thereof,  
24 but if you are the long-term licensee under an NRC license,  
25 you could be that without being the owner.

1 MR. TURI: I think it would depend upon the terms  
2 of the license. So it's hard to deal with that, because  
3 it's hypothetical, but I don't know all the provisions. It  
4 could have DOE potentially as a co-licensee with New York  
5 State and New York State could still have remaining title.

6 So I think if we went that route, that would be  
7 one of the things we'd have to deal with. But remember, to  
8 put it in context, we have another 12 years of cleanup at  
9 West Valley. So the specifics of some of these long-term  
10 surveillance and maintenance activities and  
11 responsibilities, we may be a decade away from dealing with  
12 them.

13 MS. MAZUROWSKI: I think as I go on, you will see  
14 that DOE has envisioned that DOE will complete its  
15 obligations under the Act and then return the site to New  
16 York for operational control.

17 CHAIRMAN JACKSON: Do you have a question?

18 COMMISSIONER DICUS: Yes. I have a question,  
19 again, on the same sentence. Mine is to the issue of the  
20 high level radioactive waste.

21 I'm under the impression, and Karen may have to  
22 help me out here, that high level radioactive waste always  
23 has to be under a Federal license. It can't be a state  
24 license. Am I right or wrong?

25 MS. CYR: The way we have set up our -- I mean,

1 under our agreement state policy, we do not transfer  
2 jurisdiction to a state authority.

3 COMMISSIONER DICUS: Right, for high level waste.

4 MS. CYR: To be licensed.

5 CHAIRMAN JACKSON: For high level waste.

6 MS. CYR: For high level waste.

7 COMMISSIONER DICUS: For high level waste.

8 MS. MAZUROWSKI: The high level waste canisters  
9 will be removed.

10 COMMISSIONER DICUS: They will be removed from the  
11 site.

12 MS. MAZUROWSKI: Yes.

13 COMMISSIONER MERRIFIELD: We've got these two  
14 sentences we're focusing on here from Section 5. You said  
15 that the intention of the EIS was to look at this in a  
16 holistic manner, look at the entirety of the site. Yet, the  
17 Act, both the sentence here as well as what I believe the  
18 legislative language that went along with that seemed to  
19 indicate that the focus was to be on only those areas to be  
20 associated with the high level waste, not thinking of it as  
21 a holistic effort.

22 What authority are you using for that holistic  
23 effort, the legal authority?

24 MS. MAZUROWSKI: The only legal authority we have  
25 is the West Valley Demonstration Project Act. It just makes

1 good sense to treat the site holistically and to determine  
2 D&D criteria for the whole site for project completion.

3 COMMISSIONER MERRIFIELD: But if the legislative  
4 language, Congress' decision on this, indicated that it only  
5 wanted you to look at the high level waste and not look at  
6 it holistically, what other legal authority are you using  
7 for that basis? I mean, it's not in the Act.

8 MS. MAZUROWSKI: Right. DOE only has authority  
9 under the Act.

10 COMMISSIONER MERRIFIELD: So you're saying you're  
11 acting inconsistent with the Act then.

12 MS. MAZUROWSKI: No.

13 MR. TURI: Let me ask that question of Barbara. I  
14 think what we're doing is looking at future land use and as  
15 Barbara is saying, we're looking holistically and we have  
16 cooperating agencies with New York State. So the different  
17 agencies, Federal and state agencies are cooperating to look  
18 holistically at all the different parts to make sure we  
19 don't make a decision and one part of the site is  
20 inconsistent with decisions on other parts of the site, that  
21 it all meshes together in some fashion.

22 It doesn't speak to who is financially responsible  
23 or accountable for carrying out those particular elements.  
24 Barbara, does that sound right?

25 MS. MAZUROWSKI: Yes, that is right.

1           COMMISSIONER MCGAFFIGAN:  If I might also try to  
2  -- from what I know of NEPA and some of the precedents and  
3  legal cases, NEPA tends to drive people to treat sites  
4  holistically.  So it may be prudent under NEPA, as long as  
5  they preserve their legal responsibilities, to treat the  
6  site holistically.  They may be even driven to it by NEPA.

7           COMMISSIONER MERRIFIELD:  No.  I understand.  The  
8  reason I'm going down this line of questioning and thought  
9  is we're going to hear from other folks today who are urging  
10 us to go broader, to do more, to require more of DOE and the  
11 state.

12           My reading of the Act is that we are limited in  
13 what we can do here, because of the authority that Congress  
14 has given us to -- while it's interesting to look at this in  
15 the context of NEPA, the legal authority to require, to go  
16 beyond the actual addressing of the high level waste is --  
17 may not be there.

18           MR. DENNISON:  If I may, I was just going to say  
19 -- and I agree with you, Commissioner.  We certainly  
20 recognize we have particular responsibilities and  
21 obligations under the West Valley Demonstration Act, as does  
22 the State of New York, as does the NRC.

23           NEPA, as you suggested, does require that agencies  
24 with an environmental review obligation under that statute  
25 look at the reasonably foreseeable connected actions.  We,

1 in New York, recognize that we each have responsibilities at  
2 this site. We have our decisions to make, they have their  
3 decisions to make. There are areas to be negotiated. We  
4 think it serves all of our interests and the public interest  
5 if we try to work cooperatively to look at the big picture.

6 CHAIRMAN JACKSON: Right. But the Act says, aside  
7 from the part that was highlighted, it says this Act shall  
8 not apply or be extended to any facility or property at the  
9 center which is not used in conducting the project. This  
10 Act may not be construed to expand or diminish the rights of  
11 the Federal Government.

12 So we kind of skipped a sentence there between  
13 that and your last sentence. So it takes me back to the  
14 Commissioner's fundamental question in terms of whether, in  
15 making this expansion -- and I'm not dealing with the fact  
16 of the logic of it. It really has to do with the process in  
17 terms of how one is going about deciding what's in and  
18 what's out and what you do about those things that really  
19 are out, that it does say that it may not be construed to  
20 expand or diminish -- though we're talking expansion at the  
21 moment -- the rights of the Federal Government.

22 So I'm kind of confused in terms of how we work  
23 our way through this process to where we are. Help me out  
24 lawyer Commissioner.

25 COMMISSIONER MERRIFIELD: I think the Chairman is

1 making a very good interpretation, which I concur with.

2 MS. MAZUROWSKI: I don't mean to confuse. We are  
3 limited by what our authority is under the Act. However, we  
4 believe that a holistic approach is necessary. So it is  
5 more of the rationale and, of course, we're in a joint EIS  
6 process with the State of New York and we've incorporated  
7 our citizens in that process.

8 COMMISSIONER McGAFFIGAN: One of the interesting  
9 things we're going to get to in a couple charts is we've  
10 been focused on the 200 acres, which is where most of the  
11 problem is, presumably, but I'm only now understanding that  
12 this Nuclear Service Center -- what does NSC stand for, West  
13 New York NSC -- is actually 3,345 acres.

14 So there's lots of land around this core area  
15 that's remained in New York State ERDA's hands.

16 MS. MAZUROWSKI: Right, that we have not used.  
17 Absolutely. Yes. We have not used. We have only used that  
18 portion which was required for completion of the project and  
19 to treat the high level waste.

20 COMMISSIONER McGAFFIGAN: And just as a factual  
21 matter, was the whole site, this whole -- how much of the  
22 site was licensed by us before the license was put in  
23 abeyance? Was it just the 200 acres or was it this whole  
24 3,345-acre site?

25 CHAIRMAN JACKSON: Maybe our staff should answer

1 that. John?

2 DR. GREEVES: I asked this same question before  
3 the meeting. Keep in mind, this was done back in the '60s,  
4 but the answer I have so far is it's the 200 acres. If  
5 there is a further answer, we will provide it for the  
6 record.

7 CHAIRMAN JACKSON: Okay. Thank you. Okay. Let's  
8 go on.

9 MS. MAZUROWSKI: As required by the Act, DOE --

10 CHAIRMAN JACKSON: Let's just note for the record  
11 that there is a sentence in between those two on your slide  
12 that talks about DOE limitations.

13 MS. MAZUROWSKI: Thank you. As required by the  
14 Act, DOE entered into a cooperative agreement with New York  
15 State in 1981. The purpose of the cooperative agreement was  
16 to define DOE and New York State Energy Research and  
17 Development Authority roles and responsibilities with  
18 respect to the facilities at the Western New York Nuclear  
19 Service Center.

20 The cooperative agreement divided the center into  
21 two major categories; project facilities and retained  
22 premises. Project facilities were placed under the  
23 exclusive possession and control of DOE for the duration of  
24 the project.

25 Project facilities, for example, include the

1 former nuclear fuel service reprocessing building, the high  
2 level waste tanks and low level waste water treatment  
3 facility. DOE has overall management responsibilities for  
4 certain other areas, such as Nuclear Regulatory Commission  
5 licensed disposal area, although the cooperative agreement  
6 specifically exempts DOE from having decommissioning  
7 responsibility for pre-project waste buried there.

8 In addition, DOE has no operation or  
9 decommissioning responsibility for the state licensed  
10 disposal area. The 3,300 acres make up the retained  
11 premises under continuing control of NYSERDA.

12 In addition to categorizing facilities, the  
13 cooperative agreement also discusses the activities  
14 necessary for project completion. Consistent with the West  
15 Valley Demonstration Project Act, the cooperative agreement  
16 states that DOE is responsible for decommissioning project  
17 facilities in accordance with such requirements as the  
18 Commission may prescribe.

19 CHAIRMAN JACKSON: There's that gremlin again.

20 MS. MAZUROWSKI: Right. Also, DOE is required to  
21 provide licensing assistance so that operation and control  
22 of the entire site can be returned to New York State.

23 I would now like to provide you with a brief  
24 overview of the West Valley site, followed by a discussion  
25 of major project and non-project facilities.

1           The Western New York Nuclear Service Center, which  
2 is owned by New York State, is located in a rural area  
3 approximately 35 miles south of Buffalo, New York. The West  
4 Valley Demonstration Project is located on 200 acres and  
5 represents the developed portion of the center.

6           There are two major geographic areas of the  
7 project, the north plateau and the south plateau. On the  
8 north plateau, you can see the former reprocessing facility,  
9 the newly constructed vitrification facility, and the area  
10 where the high level waste tanks are located. The north  
11 plateau also holds project low level waste storage areas and  
12 the low level waste water treatment facility and lagoon  
13 system.

14           There is contaminated ground water plume in this  
15 area, originating beneath the reprocessing building, that  
16 began during Nuclear Fuel Service operations in the 1970s,  
17 prior to DOE's project.

18           CHAIRMAN JACKSON: What contamination poses the  
19 greatest, the most significant risk to the public and to the  
20 environment?

21           MS. MAZUROWSKI: The most significant risk that  
22 was posed was the high level waste, that was the 600,000  
23 gallons in the tanks underground. That has been a very,  
24 very successful part of the project, in that DOE has been  
25 able to stabilize the high level waste into a stable glass

1 form, vitrification process.

2 CHAIRMAN JACKSON: Does the plume and all extend  
3 to the boundary of the site?

4 MS. MAZUROWSKI: No. It does not extend to the  
5 boundary of the site.

6 COMMISSIONER DICUS: Boundary of the project or  
7 boundary of the entire 3,000 acres?

8 MS. MAZUROWSKI: It does not extend to the  
9 boundary of the project nor the site. DOE has been involved  
10 in a pump-and-treat operation that prevents the plume from  
11 extending to the site. It's a mitigation process. DOE does  
12 not believe it has any long-term responsibilities for the  
13 plume since it was a pre-project waste event.

14 CHAIRMAN JACKSON: The Seneca Nation of Indians  
15 has expressed a concern regarding the environmental  
16 contamination, including ground water contamination. Are  
17 they, as far as you know, referring to a particular existing  
18 situation of ground water contamination by operations at  
19 West Valley and, if so, is it related to the Demonstration  
20 Project and are you addressing it in the EIS?

21 MS. MAZUROWSKI: The Seneca Nation of Indians and  
22 the local community has been concerned over the plume. The  
23 plume does not present any hazard or safety hazard to the  
24 environment or to the community.

25 However, there is a concern by the citizens and

1 other stakeholders that in some way the ground water may  
2 become contaminated. DOE does not believe that that is in  
3 danger of happening.

4 COMMISSIONER McGAFFIGAN: Could I ask a question?  
5 You said that once you leave, though, it's New York State  
6 ERDA's responsibility to deal with the plume.

7 MS. MAZUROWSKI: Yes.

8 COMMISSIONER McGAFFIGAN: Okay. And I guess New  
9 York State ERDA isn't testifying yet, but they will be  
10 shortly. So you're at the table, I'll ask you, do you  
11 understand that is your responsibility?

12 MR. BRODIE: We do not agree with that statement,  
13 no.

14 COMMISSIONER McGAFFIGAN: Okay.

15 CHAIRMAN JACKSON: Do go on.

16 MS. MAZUROWSKI: The south plateau area includes  
17 the two burial grounds, along with the drum cell that  
18 contains cemented waste from high level waste pre-treatment.  
19 The first burial ground is the five-acre Nuclear Regulatory  
20 Commission licensed disposal area, which contains high  
21 activity waste disposed by NFS during reprocessing  
22 operations, along with low activity waste buried during the  
23 early days of the project.

24 Approximately 99 percent of the activity in this  
25 unit resulted from pre-project disposal. Pre-project

1 burials include leached fuel house fuel assembly hardware, a  
2 fuel assembly and various types of failed equipment,  
3 contaminated soils, and treatment and processing media, such  
4 as filters and resins. The entire NDA is estimated to  
5 contain approximately 390,000 cubic feet of waste.

6 The second burial ground, which is not part of the  
7 project, is the adjacent state licensed disposal area. This  
8 unit was a commercial disposal facility licensed by the  
9 State of New York that received a variety of waste from over  
10 200 different generators. This 15-acre unit is estimated to  
11 contain more than 2.2 million cubic feet of waste.

12 Also, on the south plateau are non-project  
13 facilities, including the state licensed disposal area and  
14 the pre-project portion of the NDA.

15 CHAIRMAN JACKSON: Let me ask you this. DOE  
16 refers to an analysis of impacts and risks of potential  
17 disposition modes for the tanks and other facilities at the  
18 center. Is this analysis part of the EIS?

19 MS. MAZUROWSKI: There has been analysis done that  
20 was in the draft EIS. Since that time, we have done further  
21 re-engineering of those areas, the tanks and the process  
22 building, and our new engineering analysis has a much better  
23 performance assessment that will also be put out in the  
24 supplement.

25 CHAIRMAN JACKSON: So it will be put out as a

1 supplement to the EIS.

2 MS. MAZUROWSKI: Yes, it will be.

3 CHAIRMAN JACKSON: And is the site status report  
4 basically a completion report of the Demonstration Project  
5 or is it a more robust analysis relative -- or will it be, I  
6 should say, because it supposedly relating to the NRC's  
7 requirements, which we haven't quite promulgated.

8 MS. MAZUROWSKI: The site status report will  
9 include the whole site. Is that the question?

10 CHAIRMAN JACKSON: That wasn't quite, but that's a  
11 good answer.

12 COMMISSIONER McGAFFIGAN: Could I ask this  
13 question? Maybe it's more for Mr. Turi. Are the practices  
14 that Nuclear Fuel Services, in operating this plant up to  
15 '72, which seem extraordinary from today's perspective, was  
16 this what the AEC, the regulator at the time, was itself  
17 doing at its own facilities and is this site and the  
18 practices carried out there that were tolerated by the  
19 regulator and the state regulator, are they what happened at  
20 Savannah River and other DOE sites, more or less? I mean,  
21 high level waste buried in the ground, et cetera.

22 MR. TURI: No. The West Valley site was regulated  
23 by the regulatory side of the AEC during those early phases.  
24 We do have some very highly contaminated areas at many of  
25 our sites associated with previous practices that we're not

1 particularly proud of. So we do have high levels of  
2 contamination.

3 COMMISSIONER MCGAFFIGAN: If we look at the two  
4 sites, Hanford and Savannah River are the two sites that are  
5 not analogous, they had reactors, they had reprocessing, et  
6 cetera, we'll find stuff like this.

7 MR. TURI: Some of it. I'm not aware of any fuel,  
8 for example, that's been disposed of in the ground. There  
9 may be and I'm just not familiar enough.

10 CHAIRMAN JACKSON: Where, at Savannah River?

11 MR. TURI: Or Hanford. I'm just not familiar  
12 enough with those sites, but to the best of my recollection,  
13 that is not the case.

14 CHAIRMAN JACKSON: Well, having just visited  
15 Savannah River, I don't believe there's any underground  
16 disposition in these --

17 COMMISSIONER MCGAFFIGAN: So the regulatory  
18 actually tolerated behavior at this site that was worse than  
19 they were themselves carrying out at sites we're not proud  
20 of.

21 MR. TURI: I don't know if I'd want to go that  
22 far, because I don't have the information. I don't want to  
23 speculate on that.

24 MS. MAZUROWSKI: In addition to establishing the  
25 cooperative agreement with New York, the Act also required

1 the Department to establish an agreement with the Nuclear  
2 Regulatory Commission. As a result, the memorandum of  
3 understanding between the Department and the Commission was  
4 completed in 1981.

5 The purpose of the MOU is to define the working  
6 arrangement between DOE and the Commission for the various  
7 phases of the project. Section 4 of the MOU clearly  
8 discusses the stepped sequence of activities and agency  
9 responsibilities necessary for D&D of the project.

10 First, Section 4 requires DOE to perform an  
11 analysis of the impacts and risks associated with  
12 dispositioning project facilities. Second, once the  
13 Commission receives the analysis, they are then required to  
14 prescribe decommissioning criteria.

15 The process in the Commission paper is consistent  
16 with that defined in the MOU.

17 DOE and the New York State Energy Research and  
18 Development Authority will complete an environmental impact  
19 statement and once the Commission reviews the EIS, the  
20 Commission will then prescribe the decommissioning criteria.

21 Third, after the environmental impact statement  
22 has been completed and the Commission has prescribed  
23 decommissioning criteria, DOE is required to prepare a  
24 decommissioning plan. This plan will be reviewed and  
25 commented on by the Commission.

1           And, finally, after the commissioning phase is  
2 complete, DOE is required to prepare a site status report  
3 describing in detail the condition of the site at the  
4 completion of the project and the site status report would  
5 serve as a basis for further licensing action, as described  
6 in the cooperative agreement with New York State.

7           COMMISSIONER McGAFFIGAN: You don't have a slide  
8 on this, but I'd like to ask. How is this impacted or -- I  
9 know it stays -- it's in effect, but by the 1988 agreement  
10 with the West Valley Coalition and the Radioactive Waste  
11 Campaign, under which, up to that point, I guess, you  
12 weren't planning to do an EIS, right? Could you describe  
13 the 1988 consent agreement, after you were brought to court  
14 and what obligations that legally brings on you?

15           Because it's somewhat -- you know, the EIS is not  
16 used on this slide and, yet, of course, we're doing one.

17           MS. MAZUROWSKI: I can't -- I don't have those  
18 facts in front of me right now and my memory doesn't serve  
19 me.

20           It's my recollection that we agreed to complete an  
21 EIS, because we were putting -- we were storing -- and I may  
22 need some help from my staff. We were storing the cement  
23 drums on site and the citizens were afraid that this was a  
24 disposal and so we agreed to do an EIS for project  
25 completion when it -- at that time in the project, as would

1 allow for us to determine what the project completion  
2 forecast would be for the site.

3 Elizabeth, would you comment?

4 MS. LOWES: I think that's basically correct. A  
5 major basis for that lawsuit was related to the drum cell  
6 which was designed as a tumulus facility that could be  
7 converted into a disposal cell. The Coalition -- an EA was  
8 done for that facility and the Coalition had concerns about  
9 the need to do an EIS for disposal, and it was settled out  
10 of court, with the settlement agreement you're referring to,  
11 and DOE agreed to do an EIS before disposing of any waste on  
12 site.

13 We agreed to some other things, as well.

14 COMMISSIONER MCGAFFIGAN: But in some sense, that  
15 EIS grew into the holistic EIS that we're talking -- that  
16 we're considering today and have been drafting for several  
17 years. Is that right?

18 MS. LOWES: My suspicion is that -- and I wasn't  
19 around in those days, but the first EIS done for the  
20 vitrification portion of the project, I think there was  
21 probably a recognition that we couldn't do a holistic EIS on  
22 the whole project at that point. So they decided to do an  
23 EIS to cover solidification of the high level waste and then  
24 at some point in the future, you know, an acknowledgment  
25 that we'd have NEPA obligations for the D&D, as well. So we

1 put it all together in one EIS.

2 COMMISSIONER McGAFFIGAN: Just a thought. Is this  
3 project decommissioning plan effectively the EIS now or are  
4 you working on a separate document that is called a project  
5 decommissioning plan and the site status report you would  
6 presumably do in 2010 or whatever year you give up the site.

7 MS. MAZUROWSKI: Right.

8 COMMISSIONER McGAFFIGAN: But is there a separate  
9 document from the EIS entitled project decommissioning plan  
10 that exists or is contemplated?

11 MS. MAZUROWSKI: No.

12 COMMISSIONER McGAFFIGAN: Okay. So the EIS is  
13 effectively substituted --

14 MS. MAZUROWSKI: Yes.

15 COMMISSIONER McGAFFIGAN: -- for the project  
16 decommissioning plan.

17 MS. MAZUROWSKI: Yes, it is.

18 MR. TURI: When we drafted the MOU with NRC back  
19 in the early '80s, we weren't really sure how it was going  
20 to play out. But in working with Lee Raus and I think  
21 Charlie Hawney, who is still with the Commission, and Tom  
22 Clark, we thought this was a reasonable set of documents to  
23 prepare and we didn't think about NEPA and a lot of other  
24 things at that time.

25 COMMISSIONER McGAFFIGAN: Is there any need for

1 this MOU to be updated to get the current terms and the  
2 current state of play in it? I mean, just factually update  
3 it without any change in obligation.

4 MR. TURI: I'd say from the DOE side, we kind of  
5 feel it provides sufficient framework for the NRC/DOE  
6 interactions. It doesn't prohibit other documents being  
7 prepared, and so I think we can continue under the same  
8 framework for DOE.

9 MS. LOWES: I just wanted to make one correction.  
10 I believe what we plan to do is have a decommissioning plan  
11 following issuance of D&D criteria by the Commission, and  
12 then we would prepare a decommissioning plan.

13 So Barbara is correct. We don't have a separate  
14 plan right now.

15 COMMISSIONER McGAFFIGAN: But you will have one.

16 MS. LOWES: But we would prepare one following  
17 receipt of the decommissioning criteria.

18 CHAIRMAN JACKSON: Just a point of clarification.  
19 If you're doing this analysis of impacts and risks of  
20 potential disposition modes for the tanks and other  
21 facilities, I mean, against what are you making judgments  
22 about impacts and risks? What do you work off of, if there  
23 are no criteria requirements for you to work off of?

24 MS. MAZUROWSKI: We have been working against the  
25 NRC's license termination rule.

1           CHAIRMAN JACKSON: Except that in point of fact,  
2 as Mr. Greeves told us, the proposed criteria may go beyond  
3 the license termination criteria. Is that correct?

4           MS. MAZUROWSKI: From DOE's perspective, our goal  
5 is to meet the license termination rule, to the greatest  
6 extent we can. Our goal is to remove as much waste from the  
7 site as possible to reduce the site footprint.

8           Any areas which would have to be remained, we  
9 would then need to go to the institutional control option  
10 and that's where DOE stands.

11          MR. TURI: I think that's why it's probably timely  
12 for the Commission to allow it, to go ahead and proceed on  
13 the criteria, because it allows us to, in a supplemental  
14 draft EIS, to evaluate our cleanup possibilities against a  
15 criteria. And a year from now, we, the staff and  
16 yourselves, New York State Citizens Task Force, will be able  
17 to see our progress against the criteria.

18          So the criteria coming out now is very timely.

19          CHAIRMAN JACKSON: So, in fact, you know, this  
20 takes us back to our earlier discussion, that perhaps the  
21 NRC needs to promulgate its criteria, do whatever EIS it  
22 needs to do in order to do that, particularly where the  
23 criteria that will at least putitively come into play go  
24 beyond the license termination rule criteria.

25          COMMISSIONER MERRIFIELD: If we need to do an EIS.

1 CHAIRMAN JACKSON: If we do one.

2 COMMISSIONER MERRIFIELD: We may not need to.

3 CHAIRMAN JACKSON: Right. That's right. But even  
4 so, there still is this question of promulgating the  
5 criteria.

6 MS. MAZUROWSKI: In another moment, I will go over  
7 the process, as we understand it, and perhaps --

8 CHAIRMAN JACKSON: Good. That will help us  
9 understand it.

10 COMMISSIONER McGAFFIGAN: Madam Chairman, the one  
11 thing about the staff, in the proposal, as I understand it,  
12 it's melded in the sense that we have license termination  
13 rule, we have a waste finding that we've made, and we also  
14 look to Part 61.

15 But in some sense, this is a complex site with all  
16 of those aspects to it. So it's -- I think what the staff  
17 is essentially saying is we would apply the rules that we've  
18 established for the type of facilities that exist.

19 CHAIRMAN JACKSON: No, no, no. I don't think they  
20 disagree.

21 COMMISSIONER McGAFFIGAN: They all contemplate  
22 nothing more than 500 millirems if institutional controls  
23 fail.

24 CHAIRMAN JACKSON: We don't disagree with that.  
25 It really has to do with the fact that we're drawing on the

1 license termination rule criteria in some places, incidental  
2 waste criteria. There's the question of what kind of  
3 long-term institutional controls.

4 So I think it's promulgating, it's propagating us  
5 back to these three options that we've asked the staff to  
6 send the supplemental paper on in terms of when those  
7 criteria should be promulgated.

8 COMMISSIONER McGAFFIGAN: One of the surprising  
9 things I find in the DOE analysis is that they can, to a  
10 decimal point, after the billion dollar, guesstimate what  
11 the cost is for achieving, if they did it today, \$8.9  
12 billion would get you to --

13 CHAIRMAN JACKSON: The problem is that DOE is to  
14 the left of the decimal point most of the time and we are to  
15 the right of the decimal point. And so the decimal point is  
16 battered.

17 COMMISSIONER McGAFFIGAN: But it's a remarkable  
18 thing to be able to guesstimate to that precision how one  
19 would get to 500 millirems when you start with a site where  
20 today there are hundreds of thousands of rem, if  
21 institutional controls aren't there. So I commend DOE.

22 CHAIRMAN JACKSON: Okay. Why don't you go on?

23 MS. MAZUROWSKI: I'll continue. The Commission's  
24 paper, prepared by the NRC staff, is consistent with the  
25 intent of the West Valley Demonstration Project Act and with

1 the subsequent decontamination/decommissioning process  
2 identified in the MOU, as well as other project completion  
3 documents that were prepared almost two decades ago.

4 To explain further, I'd like to quickly go over a  
5 figure that illustrates the major steps envisioned for  
6 completing the West Valley Demonstration Project.

7 This figure is based on the information contained  
8 in the Act, the cooperative agreement, the MOU, and the  
9 Commission paper. From left to right are the major  
10 activities necessary for project completion. Activities  
11 above the shaded line represent DOE activities and  
12 activities below the line are Commission activities.

13 CHAIRMAN JACKSON: At what points on this flow  
14 diagram are the public and other stakeholders involved?  
15 Where do they specifically have input?

16 MS. MAZUROWSKI: The stakeholders have input  
17 throughout the project. We hold quarterly meetings.

18 CHAIRMAN JACKSON: I understand, but I'm just  
19 talking about in terms of this particular, this completion.

20 MS. MAZUROWSKI: The stakeholders have been asked  
21 to comment on the draft EIS and there was a six-month  
22 comment period on that draft EIS.

23 The Citizens Task Force was formed and they gave  
24 DOE and NYSERDA recommendations as to what they would like  
25 to see in the preferred alternative and what their major

1 objectives are for project completion.

2 So then when a supplement is issued, there will  
3 again be a comment period to allow the public to comment on  
4 that, and so they have been involved in -- from the  
5 beginning of the DEIS process.

6 CHAIRMAN JACKSON: And what's the overall time  
7 line here?

8 MS. MAZUROWSKI: That's very difficult to say. We  
9 would -- the DOE would like to issue -- to have a preferred  
10 alternative sometime this year. Of course, we need to work  
11 with the State of New York to resolve our differences and to  
12 prepare a preferred alternative.

13 And after a preferred alternative is agreed upon,  
14 we would like to issue the supplement and then have a record  
15 of decision in the year 2000. That's DOE's time line.

16 COMMISSIONER MCGAFFIGAN: And if we follow that,  
17 Madam Chairman, then we're supposed to be finalizing our D&D  
18 criteria in the year 2000 and if, pursuant to the previous  
19 conversation, we're supposed to do such by rule-making, then  
20 we probably had best get on with it or else we'll -- what  
21 isn't clear from down below here, it looks like DOE doesn't  
22 envision a rule-making process for us in finalizing these  
23 D&D criteria.

24 We would just use something other than a formal  
25 rule-making to make our views known at the end of this

1 process as to what the criteria are and I'm not a lawyer, so  
2 I'll look to the lawyers at the end of the table as to  
3 whether there's any problem in the implied DOE approach,  
4 that we wouldn't do it by rule-making, we would just do it  
5 by fiat or something, after having seen all the comments.

6 CHAIRMAN JACKSON: Karen?

7 COMMISSIONER McGAFFIGAN: I'm looking.

8 MS. CYR: The Act is very unclear on that. I  
9 mean, it says such criteria requirements as the Commission  
10 may prescribe. As I indicated earlier, normally when an  
11 agency takes some action and tries to propound it, it does  
12 it either by rule-making or adjudication.

13 The question is whether something short of that,  
14 such as a policy statement, would be acceptable in this  
15 circumstance, where we're prescribing criteria which the DOE  
16 is to be, in a sense, sort of the final arbiter against.

17 So it's not requirements in the same sense as we  
18 often do with respect to licensing a facility. I mean, it's  
19 a different relationship, which the statute has set up in  
20 this context, a more informal relationship, if you will,  
21 than what we would have with the licensee.

22 So the question would be whether some kind of a  
23 policy statement might be -- I mean, our initial read was  
24 that we would probably need to do something like a  
25 rule-making, but we can go back and examine whether

1 something short of that might still be acceptable.

2 CHAIRMAN JACKSON: Right. But this plays into,  
3 though, the question of long-term control and the staff is  
4 talking about potential long-term licensee, and, therefore,  
5 it propagates things back into the land of licenses and  
6 licensees, and, therefore, to me, it plays into this  
7 question of the rule-making again, because in a certain  
8 sense, we're kind of in a sense of suspended animation with  
9 respect to the West Valley Demonstration Project Act.

10 But once we are out of that mode, we are back into  
11 licensee land.

12 COMMISSIONER McGAFFIGAN: And that happens about  
13 2010. Just to follow up on the Chairman's point, I guess,  
14 from Mr. Turi's point earlier, this licensing action, return  
15 of the site to New York State ERDA, comes back into our  
16 normal NRC space around 2010.

17 CHAIRMAN JACKSON: Right.

18 COMMISSIONER McGAFFIGAN: Having done  
19 decommissioning operations and preparing this license  
20 submittal over this period in the interim.

21 So it's very complex, because you have to do  
22 whatever you're going to do in 2000 time-frame, with a view  
23 to the site coming back into normal NRC licensing space in  
24 the year 2010, approximately, or thereafter, depending on  
25 how extensive the cleanup is prior to giving it -- putting

1 the license back into effect.

2 MR. DENNISON: May I just say, I wouldn't want to  
3 leave you with the impression that this slide was intended  
4 to suggest a DOE view one way or the other, whether you do a  
5 rule-making. That's the Commission's judgment to make,  
6 obviously.

7 CHAIRMAN JACKSON: Okay. I understand.

8 MS. MAZUROWSKI: As stated in the MOU, DOE must  
9 perform an assessment of the environmental impacts  
10 associated with dispositioning project facilities. This  
11 analysis, which will include the preferred alternative and  
12 draft D&D criteria, is the supplement to the draft  
13 environmental impact statement.

14 Again, according to the MOU, the Commission will  
15 review the analysis and then prescribe final decommissioning  
16 criteria.

17 The approach in the Commission paper is consistent  
18 with these initial steps and DOE supports the sequence of  
19 events. After the decommissioning criteria are finalized,  
20 DOE is then required to prepare a decommissioning plan. The  
21 MOU requires the Commission to review the decommissioning  
22 plan and comment on it before it's finalized.

23 Once decommissioning operations are complete, the  
24 MOU requires DOE to prepare a site status report to document  
25 the condition of the project premises and support future

1 licensing action.

2 The cooperative agreement between New York State  
3 and DOE requires DOE to provide technical assistance to  
4 NYSERDA in preparing license submittal. The license  
5 submittal will form the basis for subsequent regulatory  
6 action that will disposition the license currently in  
7 abeyance.

8 After the regulatory approvals of the proposed  
9 license amendments, the cooperative agreement states the  
10 project's complete and operational control of the entire  
11 site reverts back to NYSERDA.

12 With respect to overall project completion  
13 process, the majority of these steps were established when  
14 the Act, MOU and cooperative agreement were written. The  
15 Commission paper provides additional clarity on the  
16 front-end of this process and has generally served to  
17 reinforce an already existing project completion process.

18 Therefore, DOE supports the proposed Commission  
19 approach, because it enables DOE to meet its obligations  
20 under the West Valley Demonstration Project Act in a manner  
21 that is protective of worker and public safety and safety of  
22 the environment.

23 Public health and safety will be protected by  
24 incorporating the license termination rule to the extent  
25 feasible. For those facilities where it is not technically

1 and economically feasible to meet the rule, DOE endorses the  
2 use of an ongoing license as the means for ensuring that  
3 durable institutional controls are established and  
4 maintained.

5 The license termination release criteria for the  
6 project facilities would be accomplished in two ways. The  
7 first would be to remove the majority of contamination from  
8 a particular area so that conditions for license termination  
9 without restrictions can be met and the second would be to  
10 decontaminate and stabilize a particular facility in place  
11 so that conditions for license termination with restrictions  
12 could be met.

13 In addition to recognizing the need for long-term  
14 institutional controls, DOE supports the application of  
15 incidental waste criteria. Although there is a need for  
16 consistency in applying criteria for sites that have managed  
17 high level waste, that criteria should also be flexible to  
18 allow characteristics unique to each high level waste site  
19 or facility to be factored into the incidental waste  
20 determination.

21 For this reason, DOE believes the  
22 performance-based approach provided in 10 CFR 61.58 is the  
23 most appropriate method for West Valley to make incidental  
24 waste determinations for high level waste facility closure.

25 I'd like to close by summarizing the major points

1 DOE request the Commission --

2 CHAIRMAN JACKSON: Let me ask a question. Do you  
3 think the criteria, these performance-based criteria in  
4 61.58 ought to be used at Hanford, Savannah River and Idaho?

5 MS. MAZUROWSKI: I'm going to --

6 MR. TURI: Not knowing what we're doing at those  
7 other sites, I'd be reluctant to answer that question at  
8 this time.

9 CHAIRMAN JACKSON: Well, she was saying that we  
10 should have flexibility and so our performance-based,  
11 quote-unquote, criteria in 61.58 allows flexibility. So  
12 there should be consistency of approach.

13 So would you endorse this approach applied, this  
14 particular regulation at Hanford, Savannah River and Idaho?

15 MR. TURI: I guess, Madam Chairman, without  
16 checking with my other staff, I would say yes, but I don't  
17 know because I'm not familiar enough with the analysis  
18 that's been done at Hanford and Savannah River. As a matter  
19 of principal, Madam Chairman, I think the answer is yes.

20 CHAIRMAN JACKSON: Okay. And one other question.  
21 You say you intend to take into account the recommendations  
22 -- I'm flipping to your conclusions.

23 MS. MAZUROWSKI: Okay.

24 CHAIRMAN JACKSON: Of the Citizens Task Force and  
25 other stakeholders. How do you intend to take into account

1 those recommendations? What is the process?

2 MS. MAZUROWSKI: The process is since we have  
3 already received their recommendations, we are incorporating  
4 those recommendations into the development of a preferred  
5 alternative.

6 CHAIRMAN JACKSON: Okay.

7 COMMISSIONER McGAFFIGAN: If we're finishing up  
8 with them, I have a couple questions.

9 CHAIRMAN JACKSON: Sure.

10 COMMISSIONER McGAFFIGAN: Someone mentioned early  
11 on, I think in passing, that the Act, and I meant to ask it  
12 then, listed other agencies with which you were supposed to  
13 cooperate and I think the Department of Transportation, EPA,  
14 et cetera, were listed.

15 Is there anything that's formal? Have they  
16 actually been involved in the West Valley Demonstration  
17 Project, the other agencies that I think someone said were  
18 listed in the Act?

19 MR. TURI: Yes, that was --

20 COMMISSIONER McGAFFIGAN: I guess that was  
21 Commissioner Merrifield. Or has it largely been just us  
22 involved with you all? Do you know?

23 MR. TURI: I think the NRC has been the dominant  
24 agency. I think Department of Transportation was included,  
25 to my recollection, because the transportation of the high

1 level waste to a repository. So going back 18 years, people  
2 figured that DOT was going to be involved in that in some  
3 way, shape, manner, and they weren't really sure.

4 We have had some EPA visits to the site.

5 MS. MAZUROWSKI: Yes. We do have EPA regulatory  
6 visits to the site.

7 COMMISSIONER McGAFFIGAN: But it isn't a  
8 formalized MOU type of arrangement of anything like that.

9 MS. MAZUROWSKI: No, there is not.

10 COMMISSIONER McGAFFIGAN: Okay. This true waste  
11 issue and how true waste is defined, I guess there's a ten  
12 nano curie per gram versus 100 nano curie per gram issue  
13 that this process is supposed to come to resolution on and  
14 there were some reports.

15 There was a process set up that was held in  
16 abeyance and now this process is being used to solve that.  
17 Could you just tell me a bit about how the true waste issue  
18 is supposed to play out?

19 WIPP can have Defense true waste, but in some  
20 part, this waste you could say was Defense because it's from  
21 Hanford, one of the Hanford reactors, if there is any.

22 But if you, through this process, determine that  
23 there is some transuranic waste under whatever  
24 classification we define existent on the site, what do you  
25 do with it? Because WIPP, by statute, can't receive stuff

1 that isn't from the defense sector.

2 MR. TURI: Commissioner, our plans right now are  
3 to have the transuranic waste and high level waste remain on  
4 site until some alternate facilities are established. So  
5 that would be our plans today. Barbara, is there anything  
6 else you want to add?

7 MS. MAZUROWSKI: That is how we are currently --

8 COMMISSIONER McGAFFIGAN: Earlier, I thought we  
9 heard that the vitrified high level waste would go off site  
10 at some point, but not until there's some place to put it.  
11 Does that mean that when this -- let's say we're at 2010 and  
12 you've done whatever decommissioning you have and you have  
13 the vitrified glass there, presumably in containers that  
14 look like containers in which spent nuclear fuel is  
15 contained; indeed, probably they're NRC licensed containers,  
16 I'd imagine.

17 Do we -- it's a complex license that we have at  
18 this site at that point, because we still have a lot of  
19 stuff left at the site. Is that -- am I understanding that  
20 right? Does this stuff -- if Yucca Mountain ever opens,  
21 does this stuff have any priority in terms of when it would  
22 get into Yucca Mountain?

23 MR. TURI: New York State has not signed a  
24 contract with the Department of Energy for disposal of its  
25 high level waste.

1 COMMISSIONER MCGAFFIGAN: Does it thereby avoid  
2 fees?

3 MR. TURI: You'd have to ask New York State that  
4 question.

5 COMMISSIONER MCGAFFIGAN: Okay.

6 COMMISSIONER MERRIFIELD: I have two very brief  
7 questions.

8 CHAIRMAN JACKSON: Please.

9 COMMISSIONER MERRIFIELD: One of the pieces that  
10 we had here was a demonstration of the ground water plume,  
11 which I presume is predominantly strontium-90. Are there  
12 any indications that any of that plume is resultant from the  
13 high level waste tanks at the site?

14 MS. MAZUROWSKI: No. That plume is a result of a  
15 pre-project presence on site.

16 COMMISSIONER MERRIFIELD: Pre-project presence on  
17 site.

18 MS. MAZUROWSKI: Yes.

19 COMMISSIONER MERRIFIELD: Is it your  
20 interpretation -- and there may be some disagreement here.  
21 Is it your interpretation that there is an obligation on the  
22 part of the Department of Energy to address that plume in  
23 the context of this action?

24 MS. MAZUROWSKI: The Department does not feel it  
25 is their obligation under the Act to have any long-term care

1 of that plume. As our presence on site, because we have  
2 operational control, we are protective of the environment  
3 and so we have done treatment which mitigates the progress  
4 of that plume.

5 COMMISSIONER MERRIFIELD: Thank you.

6 CHAIRMAN JACKSON: There is this issue of on site  
7 disposal of liquid, of waste removed from the high level  
8 waste tanks, and there was a proposal -- and this is the  
9 paper that has to do with this blending of criteria -- that  
10 there were some criteria for incidental wastes that were  
11 laid out in a letter from Mr. Bernero, when he was here at  
12 NRC, to John Lisle at DOE, and that, in fact, the  
13 performance objectives laid out in Part 61 would refer to  
14 waste other than this waste.

15 So when you say that 10 CFR 61.58 should be used  
16 to classify residual wastes, you mean residual, but not  
17 including this waste from these high level waste tanks.

18 MS. MAZUROWSKI: Yes, that's correct. The  
19 facilities where the incidental waste criteria would be  
20 applied address stabilizing in place those facilities, not  
21 classification of a waste form for disposal.

22 We believe Part 58 is more appropriate to  
23 demonstrate compliance with Part 61 performance objectives,  
24 because what we're really talking about here is highly  
25 contaminated equipment and debris.

1 CHAIRMAN JACKSON: Right. So tell me about the  
2 liquid waste. What is your position?

3 MS. MAZUROWSKI: The liquid waste has been  
4 stabilized into the glass canisters on site and we are  
5 currently removing any heels that are in the tank. Whatever  
6 remains in the tank would --

7 CHAIRMAN JACKSON: Yes, that's what I'm talking  
8 about.

9 MS. MAZUROWSKI: There would be less than three  
10 percent.

11 CHAIRMAN JACKSON: But what are you proposing be  
12 the criteria for that stabilization in place?

13 MS. MAZUROWSKI: The Part 58.

14 CHAIRMAN JACKSON: Again, 61.58.

15 MS. MAZUROWSKI: Yes.

16 CHAIRMAN JACKSON: Not any criteria laid out in a  
17 letter from one individual to another.

18 MS. MAZUROWSKI: Well, it's my understanding that  
19 the letter -- that we have gotten written direction from the  
20 NRC in the task plan and in the letter that I believe you're  
21 referring to, Madam Chairman. That was issued in 1992 and  
22 DOE was told to use 61.58 to determine near surface  
23 disposal.

24 CHAIRMAN JACKSON: Okay. Fine. Anything else?

25 MS. MAZUROWSKI: Unless you have any other

1 questions.

2 CHAIRMAN JACKSON: Let's hear from the New York  
3 State Energy Research and --

4 MS. MAZUROWSKI: Thank you very much.

5 CHAIRMAN JACKSON: Don't disappear. Stick around.

6 MS. MAZUROWSKI: Okay.

7 DR. PICIULO: Thank you and good morning. If I  
8 could have the first slide up, please, just so I can see my  
9 name on the screen.

10 I'm Paul Piciulo. I'm the Program Director for  
11 NYSERDA's West Valley Site Management Program. With me this  
12 morning is Mr. Hal Brodie, our Deputy Counsel, from our  
13 offices in Albany.

14 MR. BRODIE: Good morning, Commissioners.

15 MR. PICIULO: Hopefully, we'll be able to respond  
16 to all the questions that I'm sure there will be throughout  
17 the morning.

18 First, on behalf of NYSERDA, I --

19 CHAIRMAN JACKSON: I don't know where you'd get  
20 that impression.

21 MR. PICIULO: Because I just don't think that all  
22 your questions have been answered yet.

23 MR. BRODIE: It's what we call a hot bench.

24 MR. PICIULO: On behalf of NYSERDA, I want to  
25 thank you for granting our request to allow stakeholders

1 this opportunity to comment on the proposed decommissioning  
2 criteria for West Valley. I would echo John Greeves'  
3 comment, that I think this is a very beneficial process to  
4 all the agencies involved.

5 In my remarks this morning, I will summarize the  
6 comments that NYSERDA provided in our letter to Chairman  
7 Jackson. Several of our comments address NRC's roles in  
8 ensuring the Department of Energy fulfills its  
9 responsibilities under the West Valley Demonstration Project  
10 Act.

11 In order to place our comments in context, I would  
12 first like to briefly review the history of the Federal  
13 Government's involvement in creating the West Valley site,  
14 and I know you've heard a fair amount already about the  
15 history of the site.

16 If I could have the next slide, please.

17 As you know, NYSERDA holds title to the 3,300 acre  
18 site known as the Western New York Nuclear Services Center.  
19 The inset, and the viewgraph shows the center in green, the  
20 West Valley Demonstration Project occupies approximately 200  
21 acres, shown as the black area in the middle of the green.

22 The Department of Energy, as Barbara said, has  
23 exclusive use and possession of the project premises and  
24 facilities. This photograph simply shows the various  
25 facilities and waste management areas at the site and

1 Barbara did a very good job of pointing those various units  
2 out.

3 I won't repeat that, other than to say that  
4 directly adjacent to the project premises, shown in the  
5 upper right-hand corner of the picture, it's kind of a gray  
6 patch, as the SDA is covered with a synthetic geomembrane,  
7 is the 15-acre shutdown low level radioactive waste disposal  
8 facility known as the SDA.

9 NYSERDA is responsible for the management of the  
10 SDA and the New York State Department of Environmental  
11 Conservation and the New York State Department of Labor  
12 permit and license our environmental monitoring and  
13 maintenance activities of the SDA.

14 If I could have the next slide, please.

15 The Federal Government played a major role in  
16 promoting, establishing and sustaining the reprocessing and  
17 waste disposal activities at West Valley. In the 1950s and  
18 '60s, the US Atomic Energy Commission strongly encouraged  
19 the states and private companies to participate in its  
20 program to commercialize the back end of the nuclear fuel  
21 cycle.

22 The AEC made the technology and classified  
23 information on Federal nuclear fuel available and it  
24 guaranteed that it would provide spent fuel for the  
25 reprocessing facility.

1           By 1966, the only commercial nuclear fuel  
2 reprocessing facility in our nation began operations. About  
3 three-fourths of the 640 metric tons of spent fuel  
4 reprocessed at West Valley came from the Federal Government.

5           High activity waste generated from the  
6 reprocessing of the spent fuel were disposed of in what is  
7 now referred to as the NRC licensed disposal area, or the  
8 NDA.

9           The Atomic Energy Commission approved the  
10 disposals, which included wastes from operations, obviously,  
11 fuel house, and the ruptured spent fuel. Much of the waste  
12 could be considered greater than class C waste today.

13           The state licensed disposal area opened and  
14 operated between 1963 and 1975, received commercial waste,  
15 but large portions of the waste disposed of in the SDA came  
16 from the reprocessing facility and also from Federal  
17 facilities around the country.

18           Reprocessing operations at West Valley stopped in  
19 1972, when the plant was shut down for modifications, and in  
20 1976, Nuclear Fuel Services, the then site operator,  
21 notified the state and the NRC that it was withdrawing from  
22 nuclear fuel reprocessing business.

23           Policies and incentives of the Atomic Energy  
24 Commission created the West Valley site. Construction,  
25 operation and waste disposal were conducted with AEC

1 approval. However, changing Federal policies and  
2 regulations ultimately led to the demise of the commercial  
3 fuel reprocessing efforts.

4 Could I have the next slide, please?

5 In 1980, the Federal Government acknowledged its  
6 responsibility for West Valley and addressed it, in part, by  
7 passing the West Valley Demonstration Project Act.

8 COMMISSIONER McGAFFIGAN: Could I ask a question?  
9 In 1976, when Nuclear Fuel Services withdraws, is that the  
10 point where New York State ERDA gets on the license or when  
11 does New York State ERDA get on the license that exists  
12 until '81, when it suspended or put in abeyance?

13 MR. PICIULO: I think the way the process went is  
14 that NFS notified the state and NRC that it was going to  
15 pull out. The Department of Energy took on a number of  
16 studies in the late '70s to look at the site and what should  
17 happen.

18 NYSERDA was always, I guess, identified as owner  
19 on the license, but at the time of the Demonstration Project  
20 Act, everything happened very quickly. The Demonstration  
21 Project was started. The two conditions of the license were  
22 then signed, which put the license in abeyance.

23 So there was no -- my point being that there was  
24 no three or four year period that NYSERDA was the licensee.

25 COMMISSIONER McGAFFIGAN: So you're saying that

1 the legal situation, NYSERDA was the owner, but not the  
2 operator. The operator walked away in '76 and there was  
3 effectively no operator on the site for the --

4 MR. BRODIE: I will try and clarify that. We were  
5 notified in 1976 that NFS was going to leave the  
6 reprocessing business. NYSERDA and NFS had always been  
7 co-licensees on the license.

8 COMMISSIONER McGAFFIGAN: So you were an operator  
9 as well as --

10 MR. BRODIE: We were not an operator. We were  
11 licensed as the owner. NFS was licensed as the operator.  
12 NFS stayed in possession of the site until exclusive use and  
13 possession of the site were turned over to the Department of  
14 Energy, I believe in 1982.

15 COMMISSIONER McGAFFIGAN: So NFS was still on the  
16 license at the time the West Valley Demonstration Project  
17 Act is passed.

18 MR. BRODIE: That's correct.

19 COMMISSIONER McGAFFIGAN: And at the point that  
20 the license is put in abeyance as a result of the DOE  
21 submission and our license amendment.

22 MR. BRODIE: That's correct. At that time, 1982,  
23 I believe it was, there were two amendments, one of which  
24 turned exclusive use and possession over to the Department  
25 of Energy and suspended the technical specifications of the

1 license, and the other of which took NFS off the license and  
2 made NYSERDA the sole licensee of this license held in  
3 abeyance.

4 COMMISSIONER MCGAFFIGAN: And were you a happy  
5 party to that second license amendment? I mean, you  
6 understood the implications. Because some of the questions  
7 we've already had you intervene on, a lot of the differences  
8 between you and DOE may well emanate from that period.

9 MR. BRODIE: Well, let me say that it was a  
10 difficult period for a lot of parties and from New York  
11 State's perspective, it was very important to get the  
12 Department of Energy on the site.

13 The agreement with NFS that New York had entered  
14 into in the 1960s was perhaps not one that we would like to  
15 enter at this point, but it allowed NFS a lot of leeway and  
16 we felt the best circumstances would be to get the  
17 Department of Energy on there and NFS had to leave and that  
18 was the negotiated agreement.

19 COMMISSIONER MCGAFFIGAN: So there's a 1960s  
20 agreement that gives NFS lots of negotiating power vis-à-vis  
21 New York State ERDA, that, in turn, effects the 1981 and '82  
22 transactions on the license amendment leaves you as the sole  
23 licensee.

24 MR. BRODIE: I would say that's correct.

25 COMMISSIONER MCGAFFIGAN: And then now a lot of

1 the issue between you and DOE is what happens when the  
2 Demonstration Project Act ends and our license comes back,  
3 presumably.

4 MR. BRODIE: Correct. It's an interpretation of  
5 the West Valley Demonstration Project Act and the  
6 cooperative agreement that was entered into between NYSERDA  
7 and the Department of Energy.

8 COMMISSIONER McGAFFIGAN: Do you believe that  
9 you're the licensee once the project is terminated and the  
10 license is put back into place?

11 MR. BRODIE: Of whatever materials remain at the  
12 site, assuming that the Department of Energy completes the  
13 project under the terms of the cooperative agreement, there  
14 may be some residual licensing obligations for NYSERDA.

15 CHAIRMAN JACKSON: Does the cooperative agreement  
16 itself speak to potential long-term responsibility or  
17 long-term care responsibilities?

18 MR. BRODIE: What the cooperative agreement does  
19 is define project completion. There's been a lot of  
20 discussion about what the Department's limitations were  
21 under the West Valley Demonstration Project Act. I believe  
22 that the cooperative agreement provides a contemporaneous  
23 interpretation by the Department of Energy and NYSERDA of  
24 what the West Valley Demonstration Project Act meant and  
25 NYSERDA has our position on what DOE's obligations are to

1 decontaminate and decommission project facilities and  
2 project premises, as well.

3 COMMISSIONER MERRIFIELD: But that's not the  
4 controlling legal authority. Obviously, this is subject to  
5 review, but the control and legal authority would be the  
6 Act, not the MOU.

7 The NRC can obligate itself to all kinds of  
8 things, but if we have no legal basis upon which to do it,  
9 we can't be held to that standard. Simply because DOE said  
10 we'll agree to do X, Y and Z, if they don't have a basis  
11 upon the West Valley Demonstration Act to do that, they  
12 don't have a legal authority to do it.

13 MR. BRODIE: I agree with that. However, I  
14 believe that the West Valley Demonstration Project Act gave  
15 the Department of Energy authority to enter into the  
16 cooperative agreement. It was specifically contemplated and  
17 I believe that the terms, the substantive terms of the  
18 cooperative agreement are consistent with the West Valley  
19 Demonstration Project Act.

20 CHAIRMAN JACKSON: I'll let you lawyers argue a  
21 little more down the line in the discussion. Let's go  
22 further.

23 MR. BRODIE: I think Paul will talk to what our  
24 position is in terms of what we're required to -- what DOE  
25 is required to do under the Act.

1 MR. PICIULO: To jump ahead on the cooperative  
2 agreement. As Barbara said, the cooperative agreement  
3 defines the project premises, facilities, decontamination  
4 and decommissioning responsibilities and the conditions on  
5 the project completion. But it's NYSERDA's position that  
6 the Act and the cooperative agreement together require DOE  
7 to decontaminate and decommission all the premises and  
8 facilities within the 200-acre fence line, in accordance  
9 with the criteria that NRC prescribed.

10 It was acknowledged early on that DOE did not have  
11 responsibility under the West Valley Demonstration Project  
12 Act for the SDA, nor did they have responsibility for the  
13 waste disposed of in the NDA prior to the project.

14 I would like to add at this point that NYSERDA is  
15 very pleased with the success of the project thus far and  
16 especially the vitrification of the bulk of the high level  
17 waste, but there's a significant amount of work that remains  
18 to be done, and we still believe that the organizations  
19 responsible for the creation of West Valley must continue to  
20 be responsible for the management of the site, to assure the  
21 protection of public health and safety and the environment.

22 CHAIRMAN JACKSON: Let me ask you this question,  
23 just for edification. Does NYSERDA anticipate the need for  
24 long-term institutional controls for the state licensed  
25 area?

1 MR. PICIULO: Yes. I will talk on that in a few  
2 minutes.

3 CHAIRMAN JACKSON: Okay.

4 MR. PICIULO: Basically, the Federal Government  
5 also must continue to bear responsibilities for the past and  
6 present policies. A long-term Federal presence at the site  
7 is needed, as long as Federally-generated waste require  
8 maintenance and control at that site.

9 If I could have the next slide, please, I will  
10 shift at this point to summarizing our comments on the  
11 Commission paper. NYSERDA generally believes that the NRC  
12 staff paper on decommissioning criteria for West Valley sets  
13 forth a workable path for establishing decommissioning  
14 criteria.

15 However, we have concerns that we have expressed  
16 in the letter regarding assurance that there is a single set  
17 of criteria for the site and there's been a fair amount of  
18 discussion about that already, the application of the  
19 license termination rule, and the application of the  
20 incidental waste criteria.

21 If I could have the next slide, please. Thank  
22 you.

23 NYSERDA has long held and expressed the opinion  
24 that there is only one acceptable way for the Nuclear  
25 Regulatory Commission to fulfill its responsibilities at

1 West Valley, and that is to establish a single coordinated  
2 decommissioning standard that is protective of public health  
3 and safety and the environment.

4 We have repeatedly stressed that the  
5 decommissioning criteria for the Department of Energy under  
6 the Act must be the same as the criteria that NYSERDA is  
7 held to as licensee.

8 Further, the impacts of all the facilities located  
9 at the site, including the SDA, must be considered when  
10 establishing decommissioning criteria.

11 We recognize that regulatory responsibilities must  
12 be addressed. Due to the shared State and Federal  
13 regulatory framework at the site, we recognize that NRC's  
14 actions must be coordinated with the New York State  
15 Department of Environmental Conservation. We encourage and  
16 support a coordinated approach by both agencies to ensure  
17 the unified decommissioning standard for West Valley is  
18 agreed upon.

19 CHAIRMAN JACKSON: Expand upon your second bullet,  
20 if you may, that the criteria for the site must consider  
21 impacts from the State-licensed disposal area. You said you  
22 were going to speak to that when I raised my question  
23 earlier.

24 DR. PICIULO: If you have -- my -- basically when  
25 you look at -- the first part you're looking at the whole

1 site that we've talked about was that you would decommission  
2 to some standard level, maybe 25 millirem, setting aside  
3 that the disposal areas might be handled differently than  
4 previously operating facilities. And then you're going to  
5 need to look at which units get which portion of that 25  
6 millirem unless you give everybody 25 millirem.

7 If you left facilities like the SDA, which is a  
8 disposal facility, if it's not decommissioned, and I'll talk  
9 to that in a moment, if it's not decommissioned, it would  
10 have certain performance criteria that it would have to meet  
11 so that decommissioning criteria for that site, whatever it  
12 is, has to also consider the fact that there are performance  
13 criteria for disposal areas that may not be decommissioned.

14 CHAIRMAN JACKSON: Okay.

15 COMMISSIONER McGAFFIGAN: Can I just understand,  
16 are you saying that when you take -- when the license comes  
17 back into effect, 2010, two thousand whatever, that the  
18 criteria that you then face for terminating the license, if  
19 you were to desire to do so at that point, have to be the  
20 same as the criteria that we're going to be using in the  
21 interim? In other words -- that sounds like you're saying  
22 DOE basically has to terminate the license, you know, they  
23 hand it to you for a nanosecond and then we all agree it's  
24 been terminated or something. And that's a way to shift  
25 costs to DOE.

1 MR. BRODIE: Well, we don't think it's a question  
2 of cost-shifting. We think that the Department of Energy  
3 has to decommission the site under the --

4 COMMISSIONER McGAFFIGAN: You said that all 200  
5 acres.

6 MR. BRODIE: Decommission facilities used. Well,  
7 the Department of Energy insisted upon and received from  
8 NYSERDA exclusive use and possession of the project  
9 premises, and the cooperative agreement interpreting the  
10 West Valley Demonstration Project Act requires the  
11 Department of Energy to decommission and decontaminate all  
12 facilities and premises used in conducting the project. The  
13 question then becomes what premises and facilities were  
14 used. We believe the entire 200 acres were used in  
15 conducting the project. You know, people ride, people walk,  
16 people drive trucks, the facilities have been used in  
17 various ways. We believe that the entire 200 acres was used  
18 and the Department of Energy insisted upon using the entire  
19 200 acres in conducting the project.

20 COMMISSIONER MERRIFIELD: You state you believe  
21 it's the responsibility of the Department of Energy to clean  
22 up the groundwater contamination, the strontium-90  
23 contaminated water at the site --

24 MR. BRODIE: That's correct.

25 COMMISSIONER MERRIFIELD: Among these areas.

1 There is no leak of any of that hazardous waste  
2 facilities -- hazardous waste disposal, not drums but the  
3 tanks, there's no leaking of the tanks.

4 MR. BRODIE: That's correct.

5 COMMISSIONER MERRIFIELD: So there's no -- and  
6 there was no activity presumably of the Department of Energy  
7 which led to continuing exposure to strontium-90. So how do  
8 you make the analysis? What legal authority do you use in  
9 that particular case?

10 MR. BRODIE: I believe that the --

11 COMMISSIONER MERRIFIELD: Mere presence on the  
12 site?

13 MR. BRODIE: That's part of the premises that the  
14 Department of Energy has used in conducting the  
15 demonstration project.

16 CHAIRMAN JACKSON: Do you know what the source of  
17 that contamination is?

18 MR. BRODIE: I can't speak with authority on it,  
19 but there was some conjecture that it resulted from a leak  
20 during NFS operations.

21 COMMISSIONER McGAFFIGAN: In some sense all these  
22 legal differences between the two parties before us are  
23 interesting, but the most interesting question would be when  
24 might there be a resolution of these legal differences so  
25 that we, you know, we don't get, you know, it's her

1 responsibility, it's his responsibility --

2 CHAIRMAN JACKSON: Maybe we should send the two,  
3 you know, legal beagles back to the back of the room and  
4 they could come back by the end of the meeting.

5 COMMISSIONER McGAFFIGAN: Somehow I think that  
6 that may be beyond their legal capabilities, at least in  
7 that short period of time. But is there a schedule for --  
8 or how do these differences get resolved? Is it 2010 before  
9 they get resolved, or do they get resolved before you start  
10 the decommissioning? Do they get resolved in the EIS  
11 process? When do these legal differences get resolved?

12 MR. TURI: Commissioner, we've been talking with  
13 our management over the last several months, and I imagine  
14 New York State ERDA has also in terms of looking at people's  
15 responsibility and accountabilities for the different parts  
16 of the premises. And we have not completed that process  
17 internally. We would envision in the not-too-distant future  
18 that we'd be sitting down with New York State ERDA and  
19 entering into formal discussions and deal with these issues,  
20 and I think it would be our expectation and hopes that we  
21 would be able to reach an agreement this year.

22 Now the parties may agree that some issues are not  
23 ripe for decision making and may agree to put those off  
24 several years, but I think to the extent possible, we would  
25 like to reach agreement on all issues associated with the

1 West Valley site.

2 COMMISSIONER MCGAFFIGAN: Since I'm not a lawyer,  
3 I can ask this question, I hope. What is the probability  
4 that you guys will end up in court on these matters?

5 MR. TURI: I don't think -- I'm not a lawyer,  
6 either, so I don't think we will end up in court.

7 CHAIRMAN JACKSON: Let's go on.

8 DR. PICIUOLO: I'd like to speak to one of the  
9 comments that Commissioner McGaffigan made when he talked  
10 about the license being maybe back in place for a  
11 nanosecond, because I think that's -- and I'm not a lawyer,  
12 but just the way I think about this -- it's key to one of  
13 the things we don't want to have happen. We talk about a  
14 single set of criteria, but it's the application of that  
15 criteria. We don't want DOE to be able to clean up the site  
16 to a certain level just as you might say this table is clean  
17 and then to have NYSERDA come in and have to take away the  
18 water pitchers. Do you know what I mean? So it has to be  
19 to that extent.

20 And I might add that, going out, is that if I  
21 were -- as the licensee if I had responsibility alone to  
22 clean up the facilities, I would have to clean them up to  
23 whatever the standards were, and if there was long-term  
24 institutional controls or monitoring and maintenance that I  
25 came to agreement with the NRC with, I would have to provide

1 those.

2 Under the Act, DOE is -- the licenses in  
3 abeyance -- DOE has responsibility for all of those  
4 radionuclides that NRC licensed in the past. So whatever  
5 they do under the Act, if it requires some institutional  
6 control, they should provide that institutional control.

7 CHAIRMAN JACKSON: Okay. Please go on.

8 DR. PICIULO: Okay. Let me move on to slide 7.  
9 Unfortunately I didn't number the slides in your booklet.  
10 But it has to do with the application of the license  
11 termination rule. And we agree that the proposal to apply  
12 the criteria contained in the License Termination Rule would  
13 be protective of public health and safety and the  
14 environment. However, as we indicated in our written  
15 comments, there's a need for clarification of how and under  
16 what circumstances alternative criteria can be established.

17 Just to shift gears a little bit, NYSERDA believes  
18 that some of the facilities at the site may not be  
19 decommissioned, and thus long-term licensing should remain a  
20 regulatory alternative. For example, we share NRC staff's  
21 concerns regarding the feasibility of exhuming large  
22 quantities of waste from the SDA and the NDA. These are,  
23 after all, disposal facilities, and they were created and  
24 given regulatory approval with the understanding that they  
25 would be closed, stabilized, and maintained in place over

1 the long term.

2 Furthermore, analyses conducted for the  
3 environmental impact statement suggest that the impacts and  
4 expense of exhuming these facilities may not be justified.  
5 We believe that it may be appropriate for the monitoring and  
6 maintenance of the disposal facilities to remain under  
7 license for an extended period of time. Under such a  
8 scenario, the disposal facilities will not have been  
9 decommissioned. Performance criteria therefore will be  
10 needed for the disposal areas or for any other facilities  
11 that may not be decommissioned, and these performance  
12 criteria must be integrated with decommissioning criteria  
13 established for the site.

14 And if I --

15 CHAIRMAN JACKSON: Let me understand something in  
16 terms of the "provision for the establishment of alternate  
17 criteria should be clarified." Can you explain what  
18 criteria you -- are you talking about the actual criteria  
19 being clarified or that separate guidance on the  
20 circumstances for application of the alternate criteria be  
21 developed?

22 DR. PICIULO: It's the latter. Can you --

23 MR. BRODIE: Yes, we were somewhat confused by the  
24 discussion in the paper of alternative criteria since the  
25 license termination rule itself has a provision for

1 alternative criteria. We did not understand whether the  
2 staff meant something different by the term "alternative  
3 criteria" in the paper than in the License Termination Rule.  
4 We believe that the License Termination Rule itself provides  
5 the necessary flexibility and there's no need to go beyond  
6 that.

7 CHAIRMAN JACKSON: What did the staff mean, Mr.  
8 Greeves?

9 DR. GREEVES: Well, how long have we been at this  
10 now?

11 CHAIRMAN JACKSON: That's for us to judge.

12 DR. GREEVES: No, I'm trying to articulate that  
13 this discussion of terminology shows some of the  
14 difficulties we've had over time. First we referenced the  
15 License Termination Rule. In there you will find reference  
16 to something called "alternate criteria." That's what I  
17 spoke to earlier about the difference between a 25 millirem  
18 and up to 100. It is in the license termination rule.

19 The paper proposed using existing criteria such as  
20 the License Termination Rule. The paper noted that other  
21 alternatives may be necessary for the very reasons that Paul  
22 identified, Barbara identified, that as you shrink the  
23 footprint here, there may come a time where you're faced  
24 with a decision of I can't get the 500-millirem cap. And  
25 that's part of what was in the paper, what alternatives

1 beyond the License Termination Rule would be needed. So  
2 unfortunately we've used the term "alternative criteria" a  
3 number of times and ways, and it creates the confusion in  
4 part that we see around the table. So hopefully I've been  
5 clear from my perspective.

6 COMMISSIONER MCGAFFIGAN: Could I ask a question  
7 just following up on the point that he was making a moment  
8 ago about considering if we're going to have long-term  
9 institutional controls at the State disposal area and the  
10 NRC-licensed disposal area, we need to think about the  
11 criteria for the rest of the site in light of those, what  
12 we're doing at those sites.

13 I look at the paper, the appendix 3 to this -- our  
14 staff's paper -- and if we do nothing in sites 7 and 8 I  
15 guess they are, we come up to -- if institutional controls  
16 fail, 6,500 rems for the NRC disposal area, 310 rems for the  
17 State-licensed area, and the costs are 3.8 billion for the  
18 State-licensed area, 1.8 billion to get them down to, you  
19 know, to trivial levels -- or not trivial, but I suspect  
20 you'd be hard-pressed to get to 500 millirems.

21 But how does that work? If you're telling us to  
22 think about the rest of the site in light of using  
23 institutional controls in two sites where we're  
24 contemplating thousands or hundreds of rem per year if  
25 institutional controls fail, are you telling us that -- are

1 we talking about, you know, a potentially pristine area in  
2 an otherwise pretty ugly sea of radionuclides? Or are you  
3 telling us we should back up even higher than, you know, 500  
4 millirems for institutional controls failing in the rest of  
5 the site? I'm just trying to understand what you're saying.

6 DR. PICIULO: Let me give it a shot.

7 COMMISSIONER MCGAFFIGAN: Okay.

8 DR. PICIULO: First of all, if there's -- if there  
9 are institutional controls around site management or  
10 maintenance of the disposal units, as I guess perhaps it was  
11 envisioned very early on that there would be some kind of  
12 perpetual care, then we're talking about the actual  
13 performance of those units. If the SDA was there alone they  
14 would have 25 millirem that it could use and not be  
15 decommissioned. It would have 25 millirem that it can  
16 contribute to the environment per se if you adopt an  
17 older -- and if you try to apply another standard.

18 Now when you try to decommission facilities that  
19 are next to the SDA, that 25 millirem covers everything, so  
20 those units would have to be decommissioned to less still.  
21 So it may be, you know, and I believe that if there's active  
22 maintenance of the disposal facilities and they're monitored  
23 and maintained, everything could be kept, you know, well  
24 within the 25 millirem. But just the, you know, as you go  
25 through the logic in your mind and try to go through all

1 these values, you run into this confusion. I'm just  
2 bringing it up that it needs to be --

3 COMMISSIONER McGAFFIGAN: You're saying the normal  
4 operation of the State-licensed or the NRC-licensed disposal  
5 areas, the normal operation would try to ensure that no  
6 member of the public had more than 25 millirems per year.  
7 You're not addressing, though, if institutional controls  
8 fail there or at Maxi-Flats or at other of these sites  
9 that -- where practices were carried out that we don't  
10 tolerate today, you'd have a large number of rems, and so  
11 you're saying if there's another footprint to the site other  
12 than the two disposal areas, operationally it should ensure  
13 the public it's no more than 25 millirems as a result of the  
14 ongoing license, what are you saying about institutional --  
15 how much should we tolerate if institutional controls fail  
16 at the rest of the site? If we're tolerating thousands of  
17 rems at one part of the site, do we tolerate thousands of  
18 rems at another part of the site?

19 DR. PICIULO: Let me take two points. One is the  
20 use of the word, you know, "operational," because the  
21 disposal facilities would not be in essence operational,  
22 they would simply be stabilized and remain there, and in  
23 the -- since we have a lot of problems with terminology --

24 COMMISSIONER McGAFFIGAN: Okay.

25 DR. PICIULO: Because there are buildings above

1 ground that, you know, store waste, and those things could  
2 be decommissioned and those things could be viewed. But  
3 basically what we're saying is that, you know, we believe  
4 that you can rely on institutional controls to be protective  
5 of public health and safety and the environment.

6 For example, it may be feasible for the SDA, for  
7 example, or the disposal units to have a permit or a license  
8 perhaps for 100 years to continue the monitoring and  
9 maintenance under some regulatory authority, and then you  
10 may review, you know, if there's other things that need to  
11 be done at those -- for those units.

12 COMMISSIONER MCGAFFIGAN: But the  
13 license presumably is -- it's 100 years renewable for 100  
14 years essentially like Maxi-Flats, for a long time.

15 MR. BRODIE: Let me just jump in if I may. I  
16 think part of it has to do with what facilities will be  
17 decommissioned. It may be, and we think it's likely, that  
18 there will be a decision that it does not make sense to  
19 decommission the disposal areas according to the License  
20 Termination Rule at least at this time. But I think if  
21 facilities are to be decommissioned, then they must meet the  
22 requirements of the License Termination Rule. I think if  
23 they do not meet the requirements of the License Termination  
24 Rule, they cannot be considered decommissioned.

25 MR. TURI: Commissioner, if I could speak to those

1 numbers for a moment, those are coming out of a June 1996  
2 draft EIS and a number of that analysis is dated. And so  
3 the analysis is in the process of being updated, and when  
4 the supplemental draft EIS is issued later this year, we'll  
5 all have better numbers and we'll be able to take a look at  
6 what is the situation. So I would not want to make  
7 decisions today or in the next couple months based upon June  
8 1996 analysis.

9 CHAIRMAN JACKSON: I think we need to move along.

10 DR. PICIULO: Okay. Let me, if we can just go to  
11 the last slide, NRC staff's proposal to apply the incidental  
12 waste criteria to the closure of the high-level waste tanks  
13 at West Valley must be very carefully reviewed. And the  
14 incidental waste criteria have been developed and applied at  
15 DOE facilities such as Hanford and the Savannah River site.  
16 These facilities are owned and will be monitored by the  
17 Department of Energy well into the future.

18 We've all said here today that the West Valley  
19 site is unique. It's owned by NYSERDA, and New York State  
20 should not be required to bear responsibility for DOE's  
21 closure decisions. Specifically, New York State should not  
22 be responsible for assuring the long-term performance of the  
23 engineered closure of the high-level waste tanks.

24 In your review you will see that the success of  
25 the closure approach is dependent on engineered barriers

1 that are assumed to perform adequately for thousands of  
2 years. NRC should carefully review these designs and  
3 analyses to see whether or not you concur with the  
4 reasonableness of this closure approach. Further, NRC  
5 should condition any application of the incidental waste  
6 criteria that may lead to a restricted release closure of a  
7 project facility that should be conditioned on DOE's  
8 presence at the site. Basically, NYSERDA believes a  
9 restricted release closure of the high-level waste tanks  
10 should include requirements for DOE to provide institutional  
11 controls and to provide long-term monitoring and maintenance  
12 of the unit.

13 What if the New York State Department of  
14 Environmental Conservation and the NRC agree on what these  
15 should be? Your position still remains? If your own New  
16 York State Authority agrees you still feel DOE should stay  
17 in the game --

18 DR. PICIULO: Yes.

19 CHAIRMAN JACKSON: -- and that you should have  
20 that responsibility?

21 DR. PICIULO: No, because basically, you know,  
22 they are applying the technologies and providing the  
23 prediction that that would work in the long term.

24 I would go back to my comment before. If I as  
25 licensee were going to make that closure, I would have to

1 provide that long-term institutional control. If DOE to try  
2 to close those units under the Act should have the same  
3 parallel application -- if the closure is dependent on the  
4 reliability of those, the performance rather of those  
5 closure things, they should provide for the long-term care.

6 CHAIRMAN JACKSON: Well, in a certain sense,  
7 doesn't the issue devolve to this, you know, we have the  
8 West Valley Demonstration Project Act, and the question is  
9 should the Act be interpreted or can it be interpreted that  
10 DOE just does the best it can to clean it up, stabilize the  
11 waste, according to somebody's criteria and they have done  
12 that and when they have done it they have discharged their  
13 responsibility?

14 DR. PICIULO: No.

15 CHAIRMAN JACKSON: Let me finish -- or, as you are  
16 proposing, that the Act somehow obligates them for a longer  
17 period of time and/or that there is a moral obligation that  
18 obligates them for a longer period of time? I mean it seems  
19 to me that as I have listened and we have gone through the  
20 various pieces of the discussion in a certain sense that it  
21 what it devolves to in the end.

22 MR. BIRD: We believe there is a moral and a legal  
23 obligation for the Department of Energy to remain there to  
24 decommission the facilities. Decommission cannot mean one  
25 thing for the Department of Energy under the West Valley

1 Demonstration Project Act and different thing for NYSERDA  
2 under its license. Decommission in our view means  
3 decommission.

4 CHAIRMAN JACKSON: No, but in the end,  
5 decommissioning does and sometimes can involve long-term  
6 institutional controls and so in a certain sense the  
7 question that it seems to come down to in the end goes to  
8 that point, that if somehow decommissioning means long-term  
9 institutional controls that what we are really talking about  
10 is in whose court that ball resides.

11 MR. BRODIE: That's correct, but we believe that  
12 if decommissioning requires long-term institutional control  
13 then long-term institutional control is part of  
14 decommissioning, and must be provided by the Department of  
15 Energy.

16 CHAIRMAN JACKSON: Well, it's a question, in terms  
17 of the legal -- in terms of what the West Valley  
18 Demonstration Project Act requires in terms of is it just --  
19 does it just require DOE to clean it up, do the best it can  
20 according to what the criteria are that are laid out, and  
21 then that there is a separate determination and I don't want  
22 to get into it, because you guys may end up in the court  
23 about it, but it seems to me that in the end a lot of what  
24 we are talking about devolves to that.

25 MR. BRODIE: The Chairman has correctly identified

1 the issue.

2 CHAIRMAN JACKSON: Okay.

3 DR. PICIULO: Just one last point about the  
4 application of the incidental waste criteria.

5 NRC's review of the high level waste tank closure  
6 should also address DOE's approach to meeting the  
7 concentration limits for the incidental waste criteria. In  
8 short, DOE is proposing to meet two separate requirements of  
9 the incidental waste criteria by showing that the  
10 performance objective criterion will be met, which  
11 essentially eliminates one of the criteria -- specifically,  
12 the need to comply with the Class C low level waste  
13 concentration limits.

14 We believe the NRC has an obligation to hold DOE  
15 to the Class C concentration limits in 10 CFR Part 61.55 for  
16 purposes of decommissioning. If the tanks do not meet those  
17 concentration limits, then they cannot be considered  
18 decommissioned.

19 That's it for my formal comments. I just would  
20 like to say that --

21 CHAIRMAN JACKSON: So this has to do then with the  
22 stabilization in place?

23 DR. PICIULO: Yes.

24 CHAIRMAN JACKSON: So in fact you are taking some  
25 issue with using the incidental waste -- I mean --

1 DR. PICIULO: In principle I guess the incidental  
2 waste criteria could be applied.

3 CHAIRMAN JACKSON: Okay.

4 DR. PICIULO: But we shouldn't compromise -- one  
5 of the criteria that you put in there was to meet the Class  
6 C low level waste limits.

7 CHAIRMAN JACKSON: So that is an additional  
8 performance objective --

9 DR. PICIULO: It is one of the original  
10 performance objectives.

11 CHAIRMAN JACKSON: Right -- that we should ensure  
12 that that is applied.

13 DR. PICIULO: Sure. I would like to thank the  
14 Commission for this opportunity to meet and discuss the  
15 cleanup criteria for West Valley -- still a long way to go  
16 in planning for completion of the Demonstration Project and  
17 long-term management of this site.

18 NRC has been very responsive and supportive in the  
19 past for the work at West Valley, and it is very important  
20 that you continue your active involvement in planning for  
21 and monitoring the cleanup at the site.

22 If there could possibly be another question --

23 [Laughter.]

24 CHAIRMAN JACKSON: There's always the possibility  
25 that there could be another one, so don't be surprised, but

1 don't invite that.

2 Thank you very much and thank you, DOE.

3 I think now we will hear from the New York State  
4 Department of Environmental Conservation and the West Valley  
5 Citizen's Task Force. Thank you.

6 Good morning. Would you introduce -- well -- he's  
7 introduces himself.

8 MR. TOBE: I am Richard Tobe from the Citizen's  
9 Task Force.

10 CHAIRMAN JACKSON: Thank you.

11 MR. MERGES: And I am Paul Merges. I am the  
12 Chief, Bureau of Radiation and Hazardous Site Management  
13 with the New York State Department of Environmental  
14 Conservation, and with me is --

15 MR. RICE: My name is Tim Rice. I work for Mr.  
16 Merges and I am Project Manager for the Department for the  
17 West Valley site.

18 CHAIRMAN JACKSON: Okay.

19 MR. MERGES: As a member of the Capital District I  
20 welcome you to the Capital District come July 1st.

21 CHAIRMAN JACKSON: Yes.

22 MR. MERGES: As a alum of RPI and an adjunct  
23 associate --

24 [Laughter.]

25 MR. MERGES: -- I cannot help but observe that

1 since you have announced your choice of future professions  
2 that RPI's hockey team has not lost a game yet.

3 [Laughter.]

4 MR. MERGES: We have moved into first place in the  
5 ECA.

6 CHAIRMAN JACKSON: Well, I rest my case.

7 MR. MERGES: And I welcome you to the Agreement  
8 States Program in New York State come July 1st too.

9 These are the comments of the New York State  
10 Department of Environmental Conservation. I do not have any  
11 overheads with me.

12 On the decommissioning criteria for West Valley,  
13 we appreciate this opportunity the Commission has given us  
14 to day to make these comments.

15 There's 13 major comments in New York State's  
16 comments here, Department of Environmental Conservation.

17 The Commission should formally acknowledge the  
18 status of New York State as a co-regulator at the Western  
19 New York Nuclear Service Center.

20 The Commission should explicitly acknowledge the  
21 State of New York. As a co-regulator in the Western New  
22 York Service Center first through our capacity as an  
23 Agreement State regulatory agency, New York State Department  
24 of Environmental Conservation is responsible for  
25 environmental permitting and oversight of sight monitoring

1 and maintenance for the formerly operated State License  
2 Disposal Area at West Valley.

3 Next, the Environmental Agency of New York State  
4 as New York's environmental agency, the DEC, has regulatory  
5 responsibility over the Resource Conservation and Recovery  
6 Act, RCRA and TSCA -- Toxic Substance Control Act, Clean  
7 Water Act, Clean Air Act, and corresponding state laws and  
8 regulations.

9 New York State DEC has signed a 3008-H consent  
10 order with the DOE and NYSERDA to address hazardous wastes  
11 at the site. It is important that any decision regarding  
12 the radiological site decommissioning be acceptable from a  
13 RCRA standpoint since the two wastes are commingled quite  
14 often on the site.

15 Additionally, there are two licensing agencies in  
16 New York State under the Agreement States Program -- the New  
17 York State Department of Labor issues the license for  
18 NYSERDA to possess and use radioactive material at that site  
19 at the state license burial area, and the State Health  
20 Department is conducting an environmental monitoring program  
21 around the site.

22 Number 2 --

23 CHAIRMAN JACKSON: Let me ask you a quick  
24 question.

25 How extensive is NYDEC's involvement as a

1 cooperating agency in the EIS?

2 MR. MERGES: How much --

3 CHAIRMAN JACKSON: Yes, how much involvement do  
4 you have as a cooperating agency in the EIS?

5 MR. MERGES: All right. There's two different  
6 NEPAs here. One is Federal, the National Environmental  
7 Policy Act, and under the CEQ regulations we consider  
8 ourselves a cooperating agency. Also, the State has a state  
9 NEPA, which is the State Environmental Quality Review Act,  
10 and we are an involved State agency with NYSERDA in  
11 implementing the State's NEPA equivalent.

12 We have participated with and reviewed drafts of  
13 the documents as they were advanced by DOE AND NYSERDA, so  
14 we have been involved probably --

15 COMMISSIONER McGAFFIGAN: You say in your  
16 statement that though it is a separate New York regulator --  
17 the Department of Labor that is the licensing agency for the  
18 State disposal area. I asked earlier in the day and I guess  
19 I'll hold till now -- is that license still in effect?

20 MR. MERGES: Yes, it is.

21 COMMISSIONER McGAFFIGAN: And do you agree that  
22 this is a Maxi Flats -- does your counterpart in the state,  
23 the Department of Labor, agree this is a Maxi Flats-like  
24 place where perpetual institutional controls are likely to  
25 be required?

1 MR. MERGES: I can't speak for the Department of  
2 Labor. I can speak for my department on that issue, which  
3 is we think it is premature at this point in time to  
4 prejudge the Environmental Impact Statement on the  
5 determination of whether long-term institutional control is  
6 necessary. I think that is what the EIS process is for.

7 However, if there is going to be long-term  
8 institutional control we also expect the Federal Government  
9 to provide the necessary resources and staff to support that  
10 long-term institutional control.

11 COMMISSIONER McGAFFIGAN: Even though -- I mean  
12 there are lots of legal issues here, but the licensee for  
13 that is solely New York State ERDA? Is that right -- that  
14 they are the licensee?

15 MR. MERGES: For the low level waste disposal.

16 COMMISSIONER McGAFFIGAN: For the low level waste  
17 site, right.

18 MR. MERGES: That's correct.

19 COMMISSIONER McGAFFIGAN: So why would the Federal  
20 Government have responsibility for a state-licensed state  
21 institution?

22 MR. MERGES: Okay. I was not addressing --

23 COMMISSIONER McGAFFIGAN: Okay --

24 MR. MERGES: -- the state licensed burial area in  
25 that.

1           COMMISSIONER McGAFFIGAN: That is what I was  
2 trying to get at -- the state licenced burial area, which  
3 is -- if you clean it up is a \$3.8 billion job according to  
4 the EIS and if you don't has hundreds of REMs per year if  
5 institutional controls fail. That's -- if you don't clean  
6 it up and it costs a lot of money, you are talking then  
7 about a perpetual license, a Maxi Flats type situation.

8           MR. MERGES: That's correct.

9           COMMISSIONER McGAFFIGAN: And is that acceptable  
10 to the State of New York -- or you are saying you don't want  
11 to --

12           MR. MERGES: Well, further into our comments we do  
13 mention that, that the low level waste -- well, it is not  
14 quite a low level waste disposal site --

15           COMMISSIONER McGAFFIGAN: Right.

16           MR. MERGES: -- since we have an entire SNAP  
17 reactor in it as an example.

18           The low level and radioactive waste disposal area  
19 in West Valley was designed as a disposal site and I don't  
20 see any place in this country that is willing to come  
21 forward and offer to be the host site for all the wastes  
22 that are at that site -- even if we had the \$3.8 billion.

23           COMMISSIONER McGAFFIGAN: So in that case  
24 institutional controls would be paid for by New York State  
25 ERDA with New York State Department of Labor watching it

1 over a license --

2 MR. MERGES: Okay, they issue the license but the  
3 majority of the low level and radioactive waste regulation  
4 in New York State per the State Legislature rests in the  
5 Department of Environmental Conservation.

6 COMMISSIONER McGAFFIGAN: Okay.

7 MR. MERGES: So we issued siting criteria. We  
8 issued design, construction, operation, closure,  
9 environmental monitoring, site safety plan requirements and  
10 financial assurance requirements for a low level waste  
11 disposal facility to implement Part 61, for example.

12 The basic differences between us and the licensing  
13 agencies in New York State is that we are responsible for  
14 discharge and disposal of radioactive material under the  
15 Agreement States Program and that is predominantly the front  
16 door of the house where we consider the relative  
17 jurisdictions of the two agencies, either the Labor  
18 Department or the Health Department, on one side of the door  
19 and the Department of Environmental Conservation on the  
20 other side of the door, which is the outside.

21 Okay. The second comment we had was New York  
22 State Department of Environmental Conservation recommends  
23 the NRC and the DEC enter into a cooperative agreement on  
24 regulating closure of the West Valley site.

25 There's been a lot of comments on that already

1 today, but there's a lot of valid reasons for considering  
2 that besides our experience with the Cintichem reactor in  
3 Tuxedo Park.

4 There has been fair questions asked today about  
5 the 3300 acre site versus a 200 acre site and this is where  
6 that jurisdiction issue comes up, whether you people even  
7 consider you have regulatory authority on the activities  
8 over the 3100 acres that DOE does not control is an  
9 interesting issue because there are activities on that site  
10 that are going on currently and being proposed in the near  
11 future and you should address the issue whether you have  
12 regulatory authority of that other 3100 acres.

13 COMMISSIONER McGAFFIGAN: Do you believe that we  
14 ever did, based on your knowledge of the history?

15 MR. MERGES: The site was licensed by the AEC, all  
16 3300 acres, under -- and there were co-licensees -- the  
17 Atomic Space Development Authority at the time and Nuclear  
18 Fuel Services. ASDA was the predecessor agency of NYSERDA.

19 This 200 acres came about subsequently as the West  
20 Valley Demonstration Project Act.

21 COMMISSIONER McGAFFIGAN: It did strike me  
22 earlier, Madam Chairman, that when we got the answer from  
23 the Staff and they said they were going to check it, it is a  
24 little implausible that you would have a reprocessing plant  
25 with that small a footprint with all of the security and

1 everything you would need --

2 CHAIRMAN JACKSON: Good point.

3 COMMISSIONER McGAFFIGAN: -- around it, so  
4 defense-in-depth would have probably said have a large, we  
5 may well have been regulating, as New York suggests, a  
6 larger area.

7 CHAIRMAN JACKSON: Karen, maybe you could for the  
8 Commission's benefit research this issue. I mean if, as Mr.  
9 Merges has indicated, all 3300 acres were licensed by the --

10 MS. CYR: We'll work with the Staff and get an  
11 answer.

12 CHAIRMAN JACKSON: Right -- that would be good.

13 MR. MERGES: That's probably one of those licenses  
14 something like a nuclear power plant. We have a very large  
15 site and the nuclear plants use -- they have apple orchards  
16 at the Ginna plant for example, on the nonused area, that  
17 are allowed, so I am not saying that there are major  
18 problems with those areas, but your regulatory authority  
19 does need to be addressed.

20 Three, dose-based criteria should include all  
21 pathways and should apply to the entire site. I think Paul  
22 Piciulo just mentioned this. Regulatory authority for the  
23 SDA currently rests with New York State from the perspective  
24 of releases to the environment of radioactive material the  
25 Western New York Nuclear Service Center is one site. Any

1 decommissioning and closure criteria expressed in terms of a  
2 potential radiation dose, such as the NRC decommissioning  
3 rule, must take into account the combined impacts of all  
4 sources on the site.

5 Four, the criteria adopted -- NRC adopts for the  
6 West Valley Project should apply to NYSERDA once the  
7 demonstration project is completed. The Commission paper  
8 does not make this explicitly clear that the decommissioning  
9 criteria finally adopted will continue to apply after DOE  
10 has met their obligations at West Valley.

11 I can give you an example on that is to allow DOE  
12 to stabilize in place high level tanks by grouting it with  
13 concrete and then turning around and telling NYSERDA they  
14 have to greenfield that same spot on the site. It would  
15 compound their problem to actually do the decommissioning in  
16 that case or delicensing or however you call it in those  
17 terms.

18 DEC cleanup guidelines for soil contaminated with  
19 radioactive materials is an ARAR. Our technical and  
20 administrative guidance memorandum 4003, Cleanup Guidelines  
21 for Soils Contaminated with Radioactive Materials, is our  
22 currently applicable, relevant and appropriate regulation  
23 for release of areas of soil contamination under the West  
24 Valley Demonstration -- decommissioning process. They are  
25 more restrictive than the NRC's decommissioning criteria,

1 therefore any areas of the site that are designated for free  
2 release during the process are subject to our ARAR.

3 COMMISSIONER McGAFFIGAN: Could I ask a question  
4 about that? We did something by rule in one part of that  
5 rulemaking, looked at soil and my recollection is, going  
6 from 25 to 10 or 5, whatever was looked at in the generic  
7 Environmental Impact Statement, was very expensive.

8 You know, we did give states the authority to go  
9 to lower levels but we also assumed you would do a sort of  
10 similar analysis in establishing your rules.

11 Is this a guidance memo or is this a rule?

12 MR. MERGES: This is guidance to the Department  
13 staff. However, it has been an ARAR by DOE on all the DOE  
14 sites in New York State to date, and --

15 COMMISSIONER McGAFFIGAN: Have you all analyzed  
16 the cost of going from 25 to 10?

17 MR. MERGES: Well, okay. Our interpretation of  
18 that 10 is not far from EPA's 15 or your 25.

19 COMMISSIONER McGAFFIGAN: Okay.

20 MR. MERGES: I heard Steve Simon -- I am on the  
21 EPA Science Advisory Board, Radiation Advisory Committee --  
22 and Steve Simon from the National Academy of Sciences  
23 discussed the fact that the 15 and 25 really aren't that  
24 different.

25 COMMISSIONER McGAFFIGAN: Okay.

1 MR. MERGES: While we believe in implementing our  
2 10 on a realistic -- conservative but realistic scenario, as  
3 opposed to extremely conservative and unrealistic scenarios  
4 that are often applied on the Federal level.

5 From our perspective I don't really think there is  
6 that much difference between them. As far as meeting a  
7 drinking water standard for groundwater, the Department's  
8 view on that is that it is a goal to be met in a cleanup.  
9 We often do not meet it in hazardous-waste applications in  
10 our State Superfund cleanups, but it is a goal that we try  
11 for.

12 No. 6, the NRC should prescribe the criteria  
13 before the Record of Decision is issued.

14 New York State DEC can find no adequate  
15 justification in SECY-98-215 for delaying prescribing  
16 criteria for cleanup of the Western New York Nuclear Service  
17 Center until after the ROD has been signed. This is not  
18 explained by the need for flexibility built into the  
19 recommendations, which allow DOE and NYSERDA to propose  
20 alternative limits if they cannot meet the proposed limits  
21 taken for the NRC's decommissioning. The normal process --  
22 and by the way this is a process on over 600 sites in New  
23 York State, under CERCLA -- the normal process is for a  
24 regulatory agency to determine the appropriate existing  
25 limits or create appropriate site-specific values prior to

1 reaching a Record of Decision on the appropriate site  
2 cleanup.

3 So what we're looking for you basically is assure  
4 that the EIS addresses your NEPA needs in addressing  
5 alternative criteria, but adopt your criteria prior to DOE  
6 and NYSERDA adopting the ROD.

7 No. 7, NRC should provide specific guidance on  
8 justifying alternative criteria for the West Valley site.

9 It is apparent on page 5 of the paper that the NRC  
10 staff expects that there will be some areas of the site  
11 where NYSERDA and DOE cannot meet the proposed criteria  
12 under the alternatives that have been presented in DEIS,  
13 except for complete removal of all material from the site.  
14 New York State DEC agrees with this assessment. If a  
15 prudent review of the decommissioning and disposal options  
16 convinces DOE and NYSERDA that they cannot realistically  
17 meet the criteria, they would then have to present in the  
18 EIS strong justification for proposing any site cleanup and  
19 closure alternative that does not meet those criteria. A  
20 guidance with DOE to justify these alternatives needs to be  
21 developed.

22 No. 8, NRC should explain the three long-term  
23 management alternatives, one being issuance of a long-term  
24 license, over 100 years. NRC staff should include a  
25 discussion of the possible circumstances under which such a

1 long-term license would be appropriate.

2 The second one was seeking new legislative  
3 authority. NRC staff should elaborate on the need for such  
4 an expanded authority.

5 And, third, transferring the regulation of the  
6 decommissioning process to EPA under CERCLA. We did review  
7 this and we believe that under -- what we heard from EPA is  
8 that it's correct, but they need to clarify circumstances  
9 under which NRC staff believes that it would be necessary to  
10 relinquish authority over the site to EPA.

11 No. 9, any new radioactive waste disposal units  
12 must comply with current regulations.

13 There is the potential for the creation of new  
14 waste disposal cells on the site. If there is a low-level  
15 waste-disposal site being proposed, New York State DEC would  
16 expect that the design and construction would be carried out  
17 in such a manner as to meet the substantive requirements of  
18 6 NYCRR Parts 382 and 383, which are our low-level waste  
19 regulations which the Commission has deemed to be compatible  
20 with Part 61, although they're much more extensive.

21 No. 10, NRC must apply 10 CFR 61.55 and DOE must  
22 take responsibility for Greater Than Class C waste.

23 If any Greater Than Class C waste remains on the  
24 West Valley Nuclear Service Center, New York State DEC  
25 expects that as the responsible authority, the DOE will

1 maintain a presence at the site until such time as the waste  
2 is removed or the potential doses to the public reach the  
3 point at which there is no further controls on the access of  
4 that site if necessary.

5 New York State DEC would expect that all Greater  
6 Than Class C waste would be removed from the site in a  
7 timely manner for final disposition at a Federal repository  
8 as required in Part 61. We are willing to consider leaving  
9 it in place for an extended period provided that the Federal  
10 Government makes a concrete commitment to maintain a  
11 presence at the site for as long as the waste is at the  
12 Nuclear Service Center.

13 No. 11, the Decommissioning Criteria should apply  
14 to onsite and offsite contamination. We refer to the  
15 presence of surface soil contamination both on and off the  
16 Western New York Nuclear Service Center but outside of the  
17 West Valley Demonstration Project 200-acre area.

18 No. 12 --

19 CHAIRMAN JACKSON: Let me ask you a question.  
20 What is the extent of the offsite contamination, and are we  
21 able to tell if there's any offsite contamination that's  
22 been associated with that demonstration project?

23 MR. MERGES: Offsite relative to the demonstration  
24 project I have not heard of any allegation to that effect.

25 CHAIRMAN JACKSON: Okay.

1 MR. MERGES: There is offsite contamination as a  
2 result of previous operations on that site, when there was  
3 filter blowouts back in 1958. And there is cesium that is  
4 in the adjacent area. We did work with NYSERDA, try to come  
5 up with realistic cleanup of it, but we would like that to  
6 be part of the understanding that we would have with the  
7 Commission on this memorandum of understanding so that we  
8 don't walk from an area that you guys say is much -- well,  
9 you're going to go back and clean up, and we work together  
10 as coregulators.

11 COMMISSIONER McGAFFIGAN: Your prepared testimony  
12 says that this goes outside even the 3,300 acres?

13 MR. MERGES: Yes, it goes across the road, and  
14 there's several areas of private lands in the area. But  
15 this goes back all the way to 1968. This is not  
16 high-activity waste. We're down in the range of 30-40  
17 picocuries per gram of cesium. It's not a real  
18 high-activity material we're talking about, and we're  
19 talking about an area that is not extensively used and  
20 they're talking significant ecological disruption in order  
21 to go in and try and remove the material. But we do have to  
22 recognize it did exist, and we would like you people on  
23 board in whatever is finally resolved on that.

24 No. 12, the NRC should address the difference  
25 between the decommissioning of an operating facility and the

1 closure and stabilization of radioactive waste disposal  
2 sites.

3 We've just mentioned this before.

4 And, No. 13, the terms referring to the Western  
5 New York Nuclear Service Center and its subdivisions should  
6 be used consistently.

7 We would like to see a clarification in the  
8 document of terms such as "West Valley Demonstration  
9 Project," the "West Valley site," and the "site," because as  
10 we see today there's inconsistencies here.

11 That's the extent of our formal comments. Are  
12 there any questions you have?

13 CHAIRMAN JACKSON: Thank you. Let me just ask you  
14 a couple quick questions.

15 Leaving aside how this one got started, how does  
16 NYSDEC handle similar situations where there's contamination  
17 that may remain at a site and may pose long-term risks to  
18 the public, if not adequately, you know, overseeing? Does  
19 your regulatory program under various departmental statutes  
20 allow for long-term institutional --

21 MR. MERGES: Yes. Our TAGM-4003, the 10 millirem  
22 was for free release of a site. And we do realize there are  
23 instances where you're not going to free-release a site, and  
24 we actually have a site in New York where there was a deed  
25 restriction imposed on the site. It's a time-restricted

1 deed release. EPA was involved in the agreement with the  
2 site owner. And it happened to do with a radioisotope that  
3 was involved, cobalt-60, that would decay away over a period  
4 of time but not immediately. So if the family can't use --  
5 or sell the property, eventually it will go away as the  
6 radioactive material decays away.

7 COMMISSIONER MERRIFIELD: As a followup to that,  
8 although it's not within your bureau, the New York  
9 Department of Environmental Conservation presumably also  
10 allows long-term institutional controls at Superfund sites  
11 that it has within the State.

12 MR. MERGES: That's correct.

13 CHAIRMAN JACKSON: Does the State consider the  
14 drum cell wastes to be hazardous mixed waste, you know,  
15 because they're derived from processing of this listed  
16 hazardous waste?

17 MR. MERGES: I just started in the beginning of  
18 October as the RCRA Corrective Action Bureau Director, and  
19 I'm learning myself.

20 CHAIRMAN JACKSON: Okay.

21 COMMISSIONER MERRIFIELD: Lucky you.

22 MR. MERGES: I got rid of pesticides and picked up  
23 RCRA corrective action. I believe that it's the case --

24 CHAIRMAN JACKSON: Okay.

25 MR. MERGES: And that was one of the reasons that

1 the 3008-H order was entered into.

2 CHAIRMAN JACKSON: Okay, then let me ask one other  
3 question procedurally. Do you conclude that a cooperative  
4 agreement could be developed subsequent to issuing proposed  
5 criteria --

6 MR. MERGES: Yes.

7 CHAIRMAN JACKSON: Or that the proposed criteria  
8 should be held up while the cooperative agreement is being  
9 finalized?

10 MR. MERGES: No, I believe that you could adopt a  
11 criterion, enter into a cooperative agreement with New York  
12 State subsequent to it. It worked out very well in  
13 Cintichem. The cooperative agreement in that case was  
14 relatively simple. Both agencies agreed that whichever was  
15 the more restrictive cleanup criteria ended up being the  
16 criteria that was ended up to be cleaned up.

17 CHAIRMAN JACKSON: But the more important point is  
18 having those criteria in place before there's a record of  
19 decision. Is that what you're saying?

20 MR. MERGES: I believe so. I don't -- I think  
21 it's appropriate to do it -- it's a cart-before-the-horse  
22 situation otherwise.

23 COMMISSIONER McGAFFIGAN: Could I ask, before the  
24 record of decision there was this middle option the staff  
25 had where we would do -- we'd allow the process to go, but

1 there's a question of whether we do it before the EIS, the  
2 supplement to the EIS, whether we do it before the Record of  
3 Decision. Would you have us do it even before the -- right  
4 now?

5 MR. MERGES: Under NEPA, your action at hand is  
6 adopting the cleanup criteria, and as long as the  
7 environmental impact statement that DOE and NYSERDA is  
8 preparing would address your NEPA responsibilities, you  
9 would not need to go out and prepare your own separately.

10 COMMISSIONER McGAFFIGAN: Okay.

11 MR. MERGES: And so I don't see any reason.

12 COMMISSIONER McGAFFIGAN: And should we do this by  
13 rulemaking, piggybacking on the EIS in which we're a  
14 cooperating agency, or can we do this outside of rulemaking,  
15 sort of the equivalent of a policy statement or guidance  
16 memo that you all use.

17 MR. MERGES: I think that's a policy decision of  
18 the Commission on which way they want to go about that.

19 COMMISSIONER McGAFFIGAN: Okay.

20 CHAIRMAN JACKSON: Thank you.

21 I want to hear from Mr. Tobe.

22 MR. TOBE: Thank you.

23 First I want to thank the NRC for giving us the  
24 extra month. This has to a very great extent allowed us to  
25 prepare. I also want to publicly thank the NRC staff for

1 spending so much time with us over so many months as we were  
2 developing our preferred alternative for the site in our  
3 final position paper. And I want to thank Jack Parrott for  
4 briefing us on November 11 on 98-251. Although we didn't  
5 fully understand it, he helped a great deal in allowing us  
6 to see what we didn't understand.

7 I was also going to welcome Chairman Jackson to  
8 New York, but I don't think that got us as far as I had  
9 hoped.

10 [Laughter.]

11 Not that you're unwelcome, but -- welcome.

12 I also want to commend Commissioner Merrifield for  
13 his very good judgment in not coming to western New York in  
14 December. He might still be there.

15 [Laughter.]

16 I'm sorry, though, that we didn't get to see you  
17 at that site.

18 COMMISSIONER MERRIFIELD: I intend to go up there  
19 at some point in the future.

20 MR. TOBE: Great.

21 I'm Richard Tobe. I'm commissioner of a county  
22 department called Environment and Planning, and have the  
23 pleasure of also serving on a citizens' task force, and for  
24 me the roles at least of this task force are somewhat  
25 reversed from my normal duties, and it's fun.

1           It's a 16-member task force, and we operate by  
2 consensus, and happily all of our decisions have been  
3 unanimous. I do want to point out that Ray Vaughn, who is a  
4 task force member, is here in the audience today, and is  
5 also here on behalf of the West Valley Coalition. There may  
6 be some questions that are relevant to his knowledge.

7           We've provided a nine-page statement. I'd like to  
8 summarize it, and obviously not go through it in detail. I  
9 also want to deviate somewhat from it based on the way the  
10 conversation went today.

11           First, though, I must tell you that we are not  
12 very sophisticated in these matters. We've had to learn as  
13 we've gone along. But we found it incredibly difficult to  
14 understand what was being proposed in the Commission paper,  
15 and if we had so much trouble, as unsophisticated as we are,  
16 I think it should be clearer. And some of the issues that  
17 were unclear were discussed today, and perhaps there's some  
18 relevance, there was some clarity that came out of it. But  
19 I do think the paper needs to just be more clear for the  
20 general public to read and not for the more knowledgeable.

21           I'm going to repeat some of the things that have  
22 been done already just so I can make a few points.  
23 Obviously, the West Valley Demonstration Project Act  
24 provides that the Secretary of Energy shall decontaminate  
25 and decommission, not just decommission, a series of

1 facilities at the site, and they shall do so in accordance  
2 with such requirements as the Nuclear Regulatory Commission  
3 may prescribe.

4 I was involved in New York State's efforts to try  
5 and get that act passed. I worked with the State  
6 legislature in the 1970s and 1980s, and it's interesting to  
7 come back and see how work is later interpreted and focused  
8 upon.

9 Most of our effort dealt with something that's not  
10 been discussed at all today, and I think it will help  
11 illuminate at least how I view all this. What we really  
12 focused on was section 3 of the Act. That's where the  
13 appropriation is made. That's also where the 90-percent  
14 responsibility of the Federal Government is established for  
15 the financial cleanup, decontamination, and decommissioning  
16 of the site. That's what the act was primarily about, I  
17 think.

18 It was nice that we found a demonstration project  
19 that could be accomplished, a national objective that could  
20 be achieved, but we thought at the time that the real  
21 national objective was to bail out a State that had helped  
22 the Federal Government in dealing with a very difficult  
23 nuclear issue, the tail end of the nuclear cycle, dealing  
24 with nuclear waste, and set the example that States that do  
25 these things won't be left alone.

1           At the time I participated in an Aspen Institute  
2 conference in which this was discussed in the context of the  
3 attempt to establish the compact State legislation dealing  
4 with low-level waste, and I made the point at that session  
5 that one cannot ask the States to go into this compact, this  
6 new idea, if when things get tough the Federal Government's  
7 not there on a Federal issue, nuclear waste. And that  
8 effort and that reason for getting the Act passed I think  
9 illuminates much of the discussion.

10           And so when the act says decontaminate and  
11 decommission the site, DOE shall do it, I'm going to differ  
12 slightly with what other people have said about whether or  
13 not that should have two meanings or has two meanings. I  
14 think those terms are really now, although not then, being  
15 used in two very different contexts.

16           The first context is what we wanted DOE to do, the  
17 Federal Government to do, pay for the cleanup of the parts  
18 of the project that at least became the Demonstration Act.  
19 Later, much later, those terms have been used in your  
20 license termination rule, and they mean something different.  
21 When can somebody give up a license? And although there is  
22 this confusion that's been discussed about giving up a  
23 license for an operating facility versus a waste storage  
24 facility, you deal with that in your waste termination rule  
25 somehow.

1           But what I don't think is recognized and has not  
2 yet been recognized in today's sessions is that we're not  
3 really talking about decommissioning West Valley, we were  
4 talking about decontaminating it as a Federal  
5 responsibility. And as you then consider whether you will  
6 establish a special rule for the decontamination of West  
7 Valley and its decommissioning, I hope you'll bear that in  
8 mind, and think through the difference between something  
9 that's technical, having to do with a license, and the  
10 environmental impacts related to it, and this relationship  
11 that developed between the State and Federal Governments  
12 about who pays for what.

13           Going now to the national rule itself -- I'm  
14 sorry, to the 98-251 -- we hope that 98-251 will answer this  
15 question as to what's decontamination and decommission.  
16 Rather I think what it does is puts off the question, the  
17 real answer to the question, and it invites one of two  
18 things, and I'll deal with this later also. But it invites  
19 either a sense that you're rubber-stamping a decision, which  
20 we know you would not do, or that you're Monday morning  
21 quarterbacking it because you're asking for a change well  
22 after a long process has been carried out, a process in  
23 which there's a preferred alternative, there's an  
24 Environmental Impact Statement, there's perhaps a record of  
25 decision.

1           If it's going to be time-delaying to do an  
2 Environmental Impact Statement if that's necessary for you  
3 in your rulemaking or however you do this, think how much  
4 more delaying it will be if later, after the process is  
5 completed, you conclude that the regulations for  
6 decontamination and decommissioning established by DOE are  
7 unsatisfactory. Think of the uproar that will occur and the  
8 delay that will then ensue if people have all come to a  
9 conclusion that okay, let's try this. I don't think it's  
10 the right way to do it. I think prescribing rather than  
11 postscribing the regulations for decontamination and  
12 decommissioning are called for.

13           Fundamentally with regard to the national rule,  
14 though, for decontamination and decommissioning, when you  
15 adopted the rule in 1997 you set some criteria. We think  
16 that those criteria should apply to West Valley. We read  
17 98-251, and this is where some of the confusion occurs, to  
18 say use the national rule, but if it must be departed from,  
19 it can be if the Environmental Impact Statement shows some  
20 justification for doing so, and that that justification can  
21 be found if it would cause more harm than good, be  
22 prohibitively expensive, technically infeasible, and that  
23 the new requirements would have to demonstrate sufficient  
24 level of protection, reflect a reasonable balance of costs  
25 and benefits, and be a viable approach. And then also

1 indicates that the Nuclear Regulatory Commission assumption  
2 regarding the failure of institutional controls will make  
3 all West Valley decommissioning alternatives nonviable under  
4 the proposed decommissioning criteria. The paper then  
5 indicates that the other alternative, removal to an offsite  
6 location, may be difficult, controversial, costly, and  
7 time-consuming.

8 We concluded from all this as best we're able to  
9 that 98-251 would allow West Valley to be declared  
10 decommissioned under a less protective standard than the  
11 national rule when the application of the national rule  
12 would prove to be costly, controversial, time-consuming, and  
13 difficult.

14 As an aside, we assume most things you do here  
15 have all of those factors anyway. Most of the things you  
16 have to deal with are costly, are difficult, are  
17 controversial, and are time-consuming. And I don't think  
18 that alone is a sufficient justification for making an  
19 exception of West Valley.

20 But what this all means, probably means, is that  
21 there could be greater reliance on institutional controls  
22 and the maintenance of protective features. We assume that  
23 98-251 would allow human exposure in the event of the  
24 failure of institutional controls to an unspecified, at  
25 least yet unspecified, but higher level than the 100

1 millirems per year allowed in the alternative criteria under  
2 the national rule. We believe this is wrong. Rather, we  
3 think that the national rule should apply at West Valley and  
4 if the standards cannot be met, we believe West Valley  
5 should not be declared decontaminated and decommissioned,  
6 and thus DOE's job is not yet complete.

7 I've talked about the postscribe versus prescribe,  
8 and only to say again that we're quite concerned that the  
9 rules not be established first, not be prescribed. We're  
10 concerned Ray Vaughn made this word up, postscribed, can't  
11 find it in the dictionary, but that they're being  
12 postscribed, after the events are well under way you'll try  
13 and decide what the rules are. That's very different from  
14 normal rulemaking as we understand it, certainly at the  
15 State level or at my involvement at the county level, and  
16 unusual we think at the Federal level. And we don't  
17 understand why. And if the only reason is what we've heard  
18 today, concern about the delay and costs of doing an  
19 Environmental Impact Statement, it seems all out of  
20 proportion.

21 COMMISSIONER McGAFFIGAN: Madam Chairman, can I  
22 ask a question?

23 CHAIRMAN JACKSON: Please.

24 COMMISSIONER McGAFFIGAN: One of the points you  
25 make in your prepared statement is this notion of

1 time-limited institutional controls, and I know from Mr.  
2 Bond's letters he's uncomfortable as anybody would be with  
3 the institutional controls in perpetuity, which is  
4 contemplated at other DOE sites around the country, and  
5 we've been trying to get some context today.

6 But realistically, and the State regulator has  
7 just addressed, there may be parts of this site, the State  
8 disposal area, the NRC disposal area, where it's just  
9 unrealistic to get the stuff out and you really are  
10 contemplating, as EPA does at other sites under CERCLA, Maxi  
11 Flats has been mentioned in Kentucky, basically  
12 institutional controls in perpetuity where if institutional  
13 controls fail, you're in hundreds of rems, thousands of  
14 rems.

15 Are you asking for the impossible with regard to,  
16 when you say time-limited institutional controls, you're  
17 implying at some point this is a green field, all of it, all  
18 3,000 acres?

19 MR. TOBE: It is the hardest part about this site,  
20 and we start, and it's the first significant point I think  
21 we make on our own paper, that one would never pick this  
22 site for a permanent nuclear waste repository. There are so  
23 many factors that make it unsuitable. It's tributary to  
24 Buffalo's drinking water, it's Lake Erie, it's on an active  
25 geological fault, it's high water table, a lot of rain,

1 seeps come to the surface where wastes are stored in the  
2 ground. You would never pick this site to start with. And  
3 I don't think anybody's criteria would now select this site.  
4 And, as you say, removing wastes completely is very  
5 difficult, very costly, perhaps more dangerous to the people  
6 who will be doing it, to the public.

7 So how do you reconcile these things? What we  
8 came up with was that come back and visit it frequently, not  
9 do anything that is going to make it harder to eventually  
10 remove the waste. Select solutions that make it easier to  
11 monitor now, easier to retrieve now. Don't select a  
12 solution that makes it a lot harder. Don't build this giant  
13 monolith in which everything will be contained only to  
14 discover that perhaps it gets out and it's really hard to  
15 deal with, we've made a difficult problem even more  
16 difficult.

17 CHAIRMAN JACKSON: So you're really talking about  
18 a modified monitored retrievable storage.

19 MR. TOBE: With as much --

20 CHAIRMAN JACKSON: So that that would be focused  
21 in initially as part of the criteria for the design for  
22 anything that would be left in place.

23 MR. TOBE: With the other comment that as much as  
24 can be removed --

25 CHAIRMAN JACKSON: Should be.

1 MR. TOBE: Should be removed. Yes.

2 And none of the initial alternatives in the draft  
3 Environmental Impact Statement provided that alternative.  
4 And we would like as much to be removed as could be. We  
5 want as much out of the ground as possible. We believe that  
6 engineered solutions will fail over the life of these  
7 wastes. We're quite concerned about long term having the  
8 financial resources necessary to do a quick reaction if  
9 there's something dramatic that happens at the site. We  
10 want automatic triggers to reopen over periods of time to  
11 revisit all the issues, and we want opportunities to reopen  
12 when circumstances may warrant, earthquakes, floods --

13 CHAIRMAN JACKSON: Have we gotten copies of this  
14 July '98 final report of yours?

15 MR. TOBE: Yes, it's included --

16 CHAIRMAN JACKSON: It's included in --

17 MR. TOBE: Yes, it's one --

18 CHAIRMAN JACKSON: It's one of the attachments.  
19 So we need to look at that.

20 MR. TOBE: Yes. I just wanted to end with two  
21 questions that we ask and then our suggested answer. The  
22 first, should the standard for the decontamination and  
23 decommissioning of the West Valley site be different than  
24 that for the rest of the country, as I think the staff has  
25 proposed? And we say no, it should be the same. And,

1 secondly, should the NRC deviate from its normal practice in  
2 which it sets in advance clear objective standards for the  
3 protection of human health and the environment so as to  
4 guide, influence, and finally judge proposed activities?  
5 And we think no, the NRC should not deviate.

6 COMMISSIONER MCGAFFIGAN: Could I again follow up?  
7 We're trying to learn in some respects, at least I am from  
8 our sister agency at EPA, and as I say, they use their  
9 CERCLA authority at Maxi Flats, a similar -- not really  
10 similar, you've got a worse site. I mean, you've got --  
11 they've got the low-level waste site with -- and then  
12 they've got -- you've got everything else. But they set a  
13 standard, and then they have technical and practicality  
14 waivers and indefinite institutional controls under -- and  
15 Commissioner Merrifield knows this stuff better than I do,  
16 that I'm sure there's a high standard to get to use the  
17 technical and practicality waiver.

18 Are you suggesting we do -- we don't actually have  
19 that in our current rule because I don't think we  
20 contemplated sites that would ever get above 500 millirems  
21 if institutional controls failed, and here we're  
22 contemplating a site where it's 100,000 rems if  
23 institutional controls fail. So are you looking for a  
24 unique rule that builds in some of the flexibility that EPA  
25 has? It sets standards, but then it makes accommodations to

1 those standards based on judgments of technical  
2 practicality.

3 COMMISSIONER MERRIFIELD: Can I just interrupt  
4 just for the sake of your answer?

5 CHAIRMAN JACKSON: Yes.

6 COMMISSIONER MERRIFIELD: One of the things that  
7 EPA does is it uses a technical and practicability test --

8 COMMISSIONER McGAFFIGAN: Right.

9 COMMISSIONER MERRIFIELD: Technical and  
10 practicability means is it technically feasible to do the  
11 option being undertaken.

12 COMMISSIONER McGAFFIGAN: Right.

13 COMMISSIONER MERRIFIELD: And there's a separate  
14 analysis for is it unreasonably costly.

15 COMMISSIONER McGAFFIGAN: Okay. So there's two  
16 tests.

17 COMMISSIONER MERRIFIELD: It's a two-part test.

18 COMMISSIONER McGAFFIGAN: Okay.

19 MR. TOBE: And I have a two-part answer.

20 The first part deals with has it been  
21 decontaminated and decommissioned as that term might have a  
22 meaning in the West Valley Demonstration Project Act. Until  
23 it's really clean and safe, we think it's not been, and the  
24 Federal responsibility should continue.

25 How you then deal with it license-wise and

1 regulatory-wise is a second question. But I feel as if what  
2 the staff has proposed is to shoehorn in decontamination and  
3 decommissioning where it doesn't belong, but rather say it's  
4 not yet been decontaminated and decommissioned, and some  
5 continuing license or presence or rule applies to it, and  
6 then recognize the great difficulties in immediately  
7 removing the waste and the fear that we all have from the  
8 failure of institutional controls, which I think you dealt  
9 with so well in the national rule.

10 And what we see is some kind of tradeoff, the  
11 extent to which we rely upon institutional controls, the  
12 consequence of their failure as the consequence becomes  
13 greater, the things the agency has to show it can do become  
14 higher. So maybe it has cash in the bank instead of just  
15 the opportunity to go to the Federal Treasury to get the  
16 money. Maybe it makes a commitment to have trained staff  
17 there instead of just monitors.

18 But there's -- I think there's a -- these scales,  
19 and as the consequences of institutional controls or the  
20 protective features that are really important being damaged,  
21 the consequences when they are damaged increases, and  
22 something on the other side of the scale has to be put on to  
23 bring it back into sort of balance to get close to what you  
24 were seeking in the national rule. And I think that's the  
25 only way to deal with it.

1 CHAIRMAN JACKSON: Okay. Anything else?

2 MR. TOBE: Thank you very much.

3 CHAIRMAN JACKSON: Commissioner Dicus?

4 Commissioner McGaffigan?

5 COMMISSIONER MCGAFFIGAN: Nothing.

6 CHAIRMAN JACKSON: Commissioner Merrifield?

7 COMMISSIONER MERRIFIELD: Yes, I'll try and make  
8 this very brief. Obviously you can see we're grappling with  
9 what our appropriate role is here, and we had a variety of  
10 people who have come forward with us today and said that we  
11 should go in one direction or another.

12 I've always been very impressed with the direction  
13 the Chairman has always said of let's -- what are the facts?  
14 Let's look at what we have available to us and decide how  
15 we're going to go from there. In doing that, and I agree  
16 looking back at the West Valley Demonstration Project  
17 language, and this is a demonstration project, looking at  
18 the legislative history going along with that -- and it took  
19 almost five years for this bill to work its way through  
20 Congress in various forms -- it would appear to me, and I  
21 haven't heard anything otherwise today, that this act was  
22 focused on addressing and demonstrating the ability to  
23 solidify waste contained in the steel tanks there.

24 There are some attendant obligations on the part  
25 of the Secretary which we may, as has been pointed out,

1 prescribe related to the cleanup of those tanks. And while  
2 we may want to go further and deal with a whole variety of  
3 other cleanup issues which may be very justifiable at the  
4 site, I think we need to go back and have our counsel look  
5 back, what are the limitations for us in how we judge the  
6 appropriateness of the options based on the laws.

7 There very well may or may not be limits. If  
8 there are, we may have to go back to Congress and seek more  
9 authority, or others may have to go back and seek more  
10 authority. But I think we are limited by the law, and I  
11 think that's one of the things we're going to have to  
12 grapple with our staff.

13 CHAIRMAN JACKSON: Well, I would like to thank the  
14 Citizens' Task Force representatives of the State of New  
15 York, DOE, and the NRC staff for today's briefing, full and  
16 robust discussion. The Commission will as always give  
17 serious consideration to all of the views expressed here,  
18 and I guess what this briefing has done is to make it clear  
19 the complexity of the issues. And we will then have to fold  
20 that into with the additional inputs we've already asked for  
21 into our review of the NRC staff proposal for the West  
22 Valley site decommissioning and decontamination criteria.

23 It's clear that there are significant areas of  
24 disagreement on the criteria proposed as well as on the  
25 process by which the criteria would be applied, and these

1 areas then require a lot of close attention by the  
2 Commission, and we will do that. And I would like to thank  
3 all of the presenters. I originally was going to try to  
4 have a few comments from the floor, but in fact we have  
5 someone waiting for the Commission. We have another  
6 meeting. And so I want to thank everyone and thank you for  
7 your attention. We're adjourned.

8 [Whereupon, at 12:43 p.m., the briefing was  
9 concluded.]

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CERTIFICATE

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

TITLE OF MEETING: BRIEFING ON DECOMMISSIONING CRITERIA  
FOR WEST VALLEY  
PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Tuesday, January 12, 1999

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

Transcriber: Martha Brazil

Reporter: Mark Mahoney



*United States  
Nuclear Regulatory Commission*

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**Commission Briefing  
West Valley Demonstration Project**

**January 12, 1999**

**John T. Greeves, Director  
U.S. Nuclear Regulatory Commission  
Division of Waste Management**

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*United States  
Nuclear Regulatory Commission*

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## **History:**

- **Licensed by the AEC in 1966, the facilities and site were and are owned by NYSERDA and were run by Nuclear Fuel Services**
- **Operated until 1972, shutdown for upgrades, never restarted**
- **Reprocessed 640 metric tons of spent fuel, produced 600,000 gallons of liquid high-level waste**



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## **West Valley Demonstration Project Act**

- **WVDP Act, passed in 1980, directs DOE to demonstrate the solidification, transport, and disposal of the liquid HLW, and to D&D the HLW tank and related facilities**
- **WVDP Act also directs DOE to enter into an agreement with NRC to provide informal review and consultation to DOE on the project**
- **WVDP Act gives NRC the authority to prescribe requirements for D&D of the project**



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**Current Status:**

- **NRC license in abeyance until project complete, project and site are safely managed by DOE and NYSERDA**
- **85% of the liquid HLW solidified, waste stored onsite**
- **DOE and NYSERDA draft EIS issued in 1996, 10 primary waste management areas, no preferred alternative, most alternatives assume long-term control of the site, revised alternative costs range from \$1.1 to \$8.8 billion**
- **NRC process for prescribing decommissioning criteria underway (SECY-98-251)**



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**Staff Proposed Criteria:**

- **Consistent with criteria applied in other areas of NRC jurisdiction (25 mrem/yr, 500 mrem/yr cap, limited institutional control)**
- **Comprehensive - covers completion of WVDP and closure of the remainder of the site (that will return to NRC jurisdiction)**

**Staff Proposed Process for Prescribing the Criteria:**

- **Efficient - NRC cooperates in the EIS**
- **Recognizes that attaining NRC criteria may not be viable and/or prohibitively expensive**



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**Regulatory options for long-term control:**

- **Long-term license (could be > 100 years)**
- **Seek new legislative authority to allow implementation of the alternative justified by DOE/NYSERDA**
- **As a last resort, turn site decommissioning over to CERCLA authority with its long-term control provisions**



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**Proposed process for prescribing the final criteria:**

- **Commission decision will be communicated to DOE and NYSERDA as NRC proposed criteria**
- **DOE and NYSERDA will then factor the proposed criteria into their supplemental EIS which will identify a preferred alternative**
- **As a cooperating agency in the EIS NRC will provide support to DOE and NYSERDA**
- **The supplemental EIS will go out for public comment that will be factored into the final EIS**



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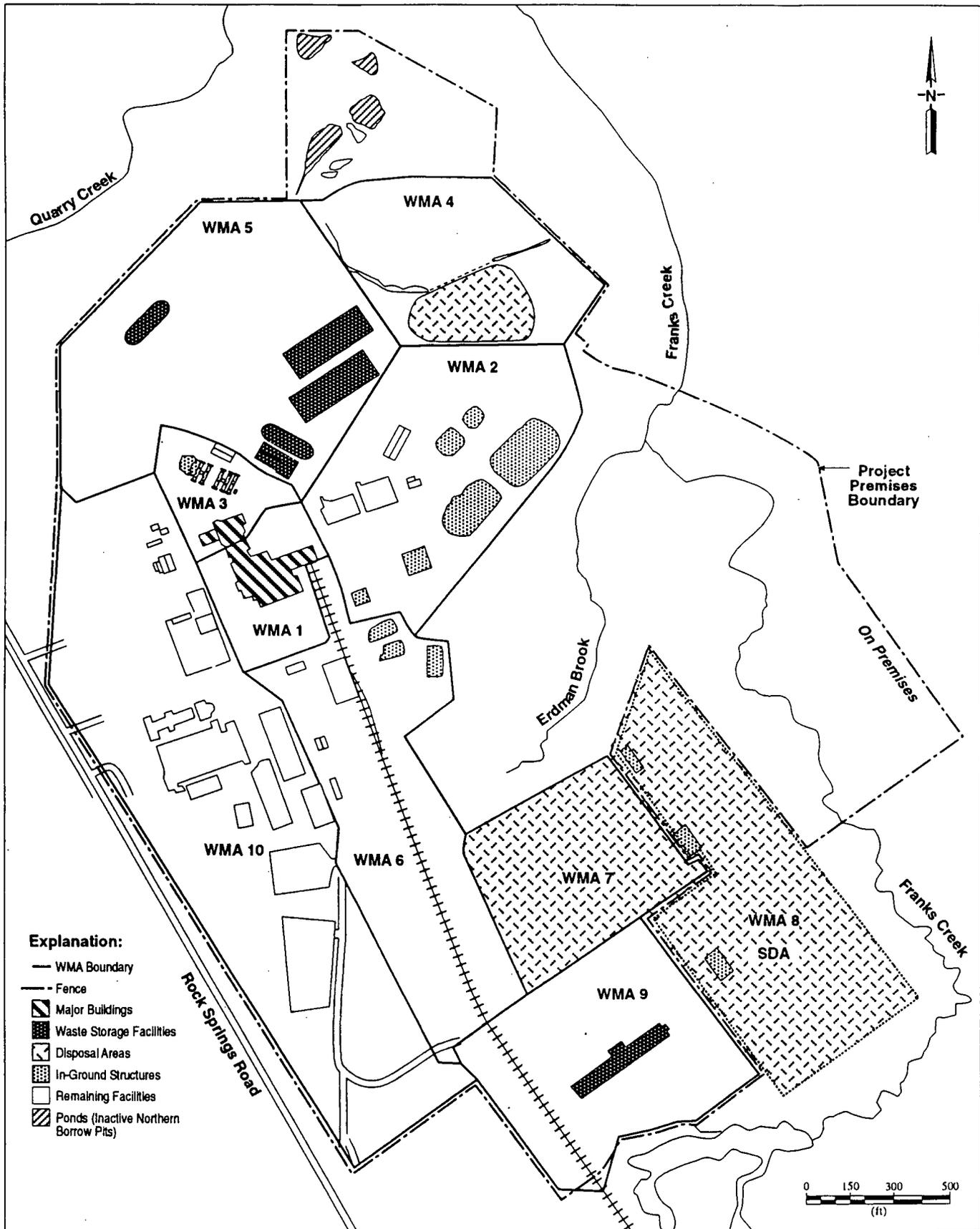
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**Proposed process for prescribing the final criteria,  
cont'd:**

**There are three options for prescribing the final D&D criteria in  
relation to the EIS process:**

- **before the final EIS and record of decision are issued**
- **after the final EIS but before the record of decision is issued**
- **after the final EIS and record of decision are issued**



**Waste Management Areas 1 through 10.**



## **POLICY ISSUE** **(Notation Vote)**

October 30, 1998

SECY-98-251

**FOR:** The Commissioners

**FROM:** William D. Travers  
Executive Director for Operations

**SUBJECT:** DECOMMISSIONING CRITERIA FOR WEST VALLEY

**PURPOSE:**

To request Commission approval on proceeding with proposed decommissioning criteria for the West Valley Demonstration Project (WVDP) and West Valley site and to inform the Commission of potential alternatives that may be necessary to ensure acceptable long-term control and care of the site.

**SUMMARY:**

The U.S. Nuclear Regulatory Commission's (NRC's) responsibilities under the WVDP Act include prescribing decontamination and decommissioning criteria for the U.S. Department of Energy (DOE). NRC's proposed decommissioning criteria will be a significant component of an environmental impact statement (EIS) being prepared jointly by DOE and the New York State Energy Research and Development Administration (NYSERDA) for decommissioning and closure of the site. NRC can also use the EIS to support its selection of criteria in accordance with the National Environmental Policy Act (NEPA). The staff is proposing decommissioning criteria that are compatible with existing regulations and guidance. Once NRC proposes the criteria, DOE and NYSERDA can consider the environmental impacts associated with attainment of the criteria and complete the EIS. Meeting these proposed criteria may require the removal and offsite disposal of large quantities of high-activity wastes, and that action may be difficult due to high cost and lack of access to offsite disposal capacity. For this reason, DOE/NYSERDA may consider leaving the wastes onsite under indefinite institutional control. Therefore, this paper also presents three regulatory alternatives, regarding long-term control of the site, that may need to be addressed in light of the proposed criteria described in this paper.

**CONTACT:** Jack Parrott, NMSS/DWM  
(301) 415-6700

**BACKGROUND:**

The West Valley site, the only commercial spent fuel reprocessing plant in the U.S., was licensed by NRC, and its predecessor agency, from 1966 until 1980, when the license was suspended to execute the 1980 WVDP Act. The WVDP Act authorizes DOE, in cooperation with NYSERDA, the owner of the site and the holder of the suspended NRC license, to carry out a liquid-high-level waste (HLW) management demonstration project that includes decommissioning of the HLW facilities. The status of the site was last described to the Commission in SECY-88-259, dated September 13, 1988. Although NRC suspended the license covering the site until completion of the WVDP, NRC has certain responsibilities, under the WVDP Act, that include prescribing decontamination and decommissioning criteria.<sup>1</sup> Further details of the legislative, legal, and regulatory history of the site are provided in Attachment 1.

The WVDP is currently removing liquid HLW from underground HLW tanks at the site, vitrifying it, and storing it onsite for eventual offsite disposal in the Federal repository. The vitrification operations are nearing completion. In addition to the vitrified HLW, the WVDP operations have also produced large quantities of low-level waste (LLW) and transuranic waste which, under the Act, must be disposed of in accordance with applicable licensing requirements. Besides the HLW at the site, the historical spent fuel reprocessing and waste disposal operations resulted in large quantities of a full range of buried radioactive wastes and structural and environmental contamination at the site. Further details of the wastes at the site are provided in Attachment 2.

In 1989, DOE and NYSERDA began to develop a joint EIS for project completion and site closure, and to evaluate waste disposal and decommissioning alternatives. Because the WVDP Act requires NRC to prescribe decommissioning criteria for the project, NRC and DOE agreed on NRC's participation as a cooperating agency on the EIS, with DOE and NYSERDA, to aid NRC in its decision on decommissioning requirements. NRC staff raised many significant issues in comments on the draft EIS published in 1996. Further details of the draft EIS, which include potential costs and doses for the various alternatives, as well as the general NRC comments, are provided in Attachment 3.

After public review of the draft EIS, the WVDP convened a Citizen's Task Force (CTF) in early 1997 (in a process similar to Site-Specific Advisory Boards required under Subpart E of Part 20) to obtain stakeholder input on the EIS. The CTF recommendations for the preferred alternative in the EIS were completed in July 1998. The CTF generally does not believe the West Valley site is suitable for long-term isolation of the waste already at the site and, therefore, favors

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<sup>1</sup> Under the WVDP Act, NRC's responsibility to prescribe requirements applies only to DOE's decontamination and decommissioning activities. However, NRC, DOE, and NYSERDA have long favored addressing environmental impacts on a site-wide basis. Therefore, the EIS, the decommissioning criteria, and long-term control alternatives discussed in this paper cover both DOE's completion of the project and NYSERDA's closure of the site. In addition, it is anticipated that, after DOE's completion of the WVDP, the NRC license would be reinstated and NRC decommissioning criteria would therefore apply to those portions of the site under NRC licensure.

disposal of the waste offsite at suitable and safe disposal facilities. Further details of the CTF process and a copy of the CTF recommendations are provided in Attachment 4.

#### DISCUSSION:

The staff has been involved in the West Valley joint EIS process from the beginning. This involvement includes participating in the CTF meetings to learn what is important to the local stakeholders. For the EIS to progress, NRC needs to provide proposed decommissioning criteria. Once this proposal is provided, DOE and NYSERDA can proceed with considering the environmental impacts and alternatives for site decommissioning and closure under the NEPA process, and developing a revised preferred alternative in a supplement to the draft EIS. This supplement is scheduled for release in July 1999.

#### Proposed Process for Establishing Decommissioning Criteria

The WVDP Act requires NRC to prescribe decontamination and decommissioning requirements for the WVDP. To do this the staff plans, with Commission approval, to propose the decommissioning criteria in this paper to DOE/NYSERDA. It is intended that DOE/NYSERDA will evaluate decommissioning and closure of the site, using the proposed criteria, and indicate a preferred alternative, in a supplement to their draft EIS that will be provided to the public for comment.

After DOE/NYSERDA considers the public comments on the supplement they will issue the final EIS and Record of Decision including the preferred alternative. If staff agrees that the preferred alternative conforms to the proposed decommissioning criteria and is adequately protective of the public health and safety and the environment, staff will seek Commission approval to prescribe the decommissioning criteria (by adjudication or by rulemaking) as the decommissioning criteria for the WVDP and thus fulfill NRC obligations under the WVDP Act. If the DOE/NYSERDA preferred alternative does not conform to the proposed decommissioning criteria, or if DOE/NYSERDA propose alternative criteria, then the staff will recommend an approach for approval by the Commission.

#### Decommissioning Criteria

The term "decommissioning criteria" is used broadly here to include criteria for potential waste disposal at the West Valley site. This discussion also assumes that some waste currently being stored or produced at the site (i.e., spent fuel in storage and vitrified HLW) will be removed and disposed of offsite, in accordance with the WVDP Act, and that no criteria are needed for such waste. Also, immediately adjacent to the project premises is a State-licensed pre-10 CFR Part 61 LLW disposal site called the State-Licensed Disposal Area (SDA). The SDA contains a large volume of LLW, including elevated concentrations of long-lived radionuclides such as transuranics. Because the SDA is not part of the WVDP, the prescription of decommissioning criteria, and other issues discussed in this paper, do not consider that area. However, the impacts from the SDA are considered in the site-wide EIS. In addition, it is assumed that all worker exposures and effluent releases during decommissioning will be constrained by existing operational limits.

In considering guidelines for the decommissioning criteria for West Valley, the staff evaluated NRC's precedents for disposal of similar wastes and decommissioning of other civilian and defense nuclear facilities. These precedents include: NRC's 1987 letter to DOE/NYSERDA, focusing on disposal of supernatant wastes at West Valley (Attachment 5); NRC's 1993 position on incidental waste, as applied to waste removed from HLW tanks at Hanford (Attachment 6); NRC's proposed approach to waste classification for closure of HLW tanks at Savannah River, contained in a memorandum to the Commission dated September 13, 1996; the performance objectives of 10 CFR Part 61; and NRC's License Termination Rule in 10 CFR Part 20, Subpart E. In addition, U.S. Environmental Protection Agency's (EPA's) standards in 40 CFR Part 191 may constrain the options for dealing with any residual HLW in the tanks or residual spent nuclear fuel<sup>2</sup> at the site.

#### Proposed Decommissioning Criteria

Based on these precedents, the staff proposes to inform DOE and NYSERDA that they should use NRC's License Termination Rule criteria as proposed decommissioning criteria for the completion of that portion of the EIS that covers areas of residual waste or the closure of existing waste disposal areas. The principles reflected in these proposed criteria would include:

- Dose to the average member of the critical group does not exceed 25 mrem/yr and is as low as is reasonably achievable (ALARA), for unrestricted use.
- Dose to the average member of the critical group does not exceed 25 mrem/yr and ALARA, for restricted use, with institutional controls in place.
- There is an allowance for institutional controls for up to 1000 years<sup>3</sup>.
- Dose to the average member of the critical group does not exceed either 100 or 500 mrem/yr and is ALARA, assuming institutional controls fail.

For any onsite disposal of liquid supernate waste removed from the HLW tanks and solidified or any material remaining in the HLW tanks after closure, the staff plans to inform DOE and NYSERDA that they should use the criteria (i.e., incidental waste criteria) described in the March 2, 1993, letter from R. Bernero, NRC, to J. Lytle, DOE (Attachment 6) as the proposed criteria for the completion of the EIS. These proposed criteria would include that the waste:

- Has been processed (or will be further processed) to remove key radionuclides, to the maximum extent that is technically and economically practical;
- Will be incorporated in a solid physical form at a concentration that does not exceed

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<sup>2</sup>There is spent nuclear fuel at the site not only in the spent fuel pool (which DOE has committed to remove from the site), but also, as residual contamination, in the former reprocessing building, as well as buried waste, in the NRC-licensed disposal area portion of the site.

<sup>3</sup>Although 10 CFR Part 61 limits reliance on institutional controls, the Commission subsequently allowed reliance on such controls for up to 1000 years in the Statement of Considerations for the Final Rule on Radiological Criteria for License Termination (62 FR 39058), Section B.3.3.

- the applicable concentration limits for Class C low-level waste as set out in 10 CFR Part 61;
- Will be managed, pursuant to the Atomic Energy Act, so that safety requirements comparable to the performance objectives set out in 10 CFR Part 61 are satisfied.

For other stored project wastes, any onsite disposal of that waste will meet the performance objectives of Part 61 (see Attachment 5). The EIS will evaluate the potential impacts of various decommissioning alternatives, and is expected to support NRC's selection and prescription of decommissioning criteria for WVDP completion and site closure. NRC staff plans to rely on the results of the EIS to recommend for Commission consideration final decommissioning criteria for West Valley. If DOE/NYSERDA depart from any of the proposed criteria described in this paper to complete the EIS, the EIS will need to show some justification such as that adherence to the proposed criteria would cause more human or environmental harm than good or be prohibitively expensive/technically infeasible, and that any alternative criteria chosen demonstrate a sufficient level of protection of human health and safety and the environment, reflect a reasonable balance of costs and benefits, and represent a viable approach.

The final EIS is expected to consider a complete range of decommissioning and closure alternatives and their associated impacts. Consideration of options for the Commission's prescription of decommissioning criteria will be better informed by the EIS. However, at this time the staff has identified several potential implications of these proposed criteria. The proposed criteria are compatible with the regulations and guidance produced by NRC under the authority of the Atomic Energy Act of 1954, as amended. Their application could also be interpreted as being consistent with the CTF recommendations if they resulted in safe offsite disposal of most of the radioactive waste and contamination (see Attachment 4). This approach is also generally consistent with the dose limits in DOE's proposed draft regulations in 10 CFR Part 834, "Radiation Protection of the Public and the Environment," dated March 3, 1997.

However, assumption of the eventual failure of institutional controls, under Parts 20 and 61, runs counter to the assumption, made by DOE/NYSERDA in the draft EIS, of an unlimited institutional control period, which is allowed by draft Part 834. Because of long-term erosion and source-term release problems at the West Valley site, applying the NRC assumption of time-limited institutional control will likely make all alternatives, in the draft EIS, that leave residual and stored wastes onsite, nonviable under the proposed decommissioning criteria, and might require a long and costly (possibly prohibitively expensive) remediation (see Table 1 of Attachment 3 for preliminary DOE/NYSERDA estimates of the potential costs of remediation). Besides cost, offsite removal of significant amounts of waste may be difficult to implement because of lack of access to offsite waste disposal. Relocating the radioactive waste offsite may be controversial and may substantially delay site decommissioning and closure.

#### Potential Alternatives for Long-Term Control of the Site

Most of the alternatives in the draft EIS rely on long-term control of the site in order to meet decommissioning criteria. Therefore, it is possible that DOE/NYSERDA may choose a preferred decommissioning alternative in the EIS that requires extended reliance on institutional controls. In anticipation, the staff has identified the following regulatory alternatives for potential long-term control of the site:

- 1) Issuance of a license, for an extended period of time, similar to the SAFSTOR concept of reactor decommissioning or the extended interim storage concept of LLW, until such time as the hazard is removed from the site (could exceed 100 years).
- 2) Seek new legislative authority to allow implementation of the decommissioning alternative justified by DOE/NYSERDA as a means for protecting the public and environment (similar to DOE's proposed requirements in Part 834).
- 3) As a last resort, adopt a strategy, as outlined in NRC's Strategic Plan for fiscal years 1997-2002 (NUREG-1614, Vol. 1), of transferring the regulation of decommissioning to EPA if there is no workable remedy under NRC's authority. EPA's authorization under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, §121(c), includes allowing long-term control remedies at contaminated sites (e.g., the Maxey Flats LLW disposal site).

If DOE/NYSERDA's preferred alternative relies on long-term institutional control, NRC may have to evaluate one of, or some combination of, the above alternatives, or some other alternative for the long-term control of the site. The staff will keep the Commission apprised of staff's participation in the West Valley process and will return to the Commission, on completion of the West Valley EIS, for approval of an approach for prescribing decommissioning requirements.

**RECOMMENDATION:**

The staff recommends that the Commission:

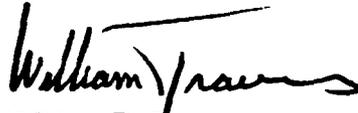
1. Approve of the approach described in this paper, for providing DOE and NYSEERDA with proposed criteria for decommissioning the WVDP and West Valley site.
2. Note the potential alternatives for long-term control of the site.
3. Note that NRC action to actually prescribe the decommissioning requirements in accordance with the WVDP Act will take place at a later date, after completion of the EIS process.

The Commissioners,

- 7 -

COORDINATION:

The Office of the Chief Financial Officer has reviewed this Commission Paper for resource implications and has no objections. The Office of the General Counsel has reviewed this Commission Paper for legal implications and has no legal objection.



William D. Travers  
Executive Director  
for Operations

Attachments:

1. West Valley Legislative, Legal, and Regulatory History
2. Background on Radioactive Waste at West Valley
3. Details of the West Valley EIS
4. Details of the West Valley Citizen's Task Force
5. Ltr to W. Bixby, DOE, from M. Knapp, NRC, dtd 8/18/87
6. Ltr to J. Lytle, DOE, from R. Bernero, NRC, dtd 3/9/93

Commissioners' completed vote sheets/comments should be provided directly to the Office of the Secretary by COB Tuesday, November 17, 1998.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT November 9, 1998, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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## WEST VALLEY LEGISLATIVE, LEGAL, AND REGULATORY HISTORY

### 1. INTRODUCTION

From 1966 to 1972, under an Atomic Energy Commission 10 CFR Part 50 license, Nuclear Fuel Services (NFS) reprocessed 640 metric tons of spent fuel at its West Valley, New York, facility. In 1972, the facility shut down, for modifications, to increase its seismic stability and expand capacity. In 1976, without restarting the operation, NFS withdrew from the reprocessing business and returned control of the facilities to the site owner, the New York State Energy Research and Development Authority (NYSERDA). The reprocessing resulted in 600,000 gallons of liquid high-level waste (HLW), stored below ground in HLW tanks, and other radioactive wastes and residual radioactive contamination, as described in Attachment 2.

### 2. WEST VALLEY DEMONSTRATION PROJECT ACT

In 1980, Congress passed the West Valley Demonstration Project (WVDP) Act, PL 96-368, to authorize the U.S. Department of Energy (DOE) to carry out a liquid HLW management demonstration project at the site. Therefore, the facility's license was amended in 1981 to give DOE exclusive possession of the central portion of the site containing the buildings and facilities, known as the project premises, and to suspend the Part 50 license until the WVDP was completed.

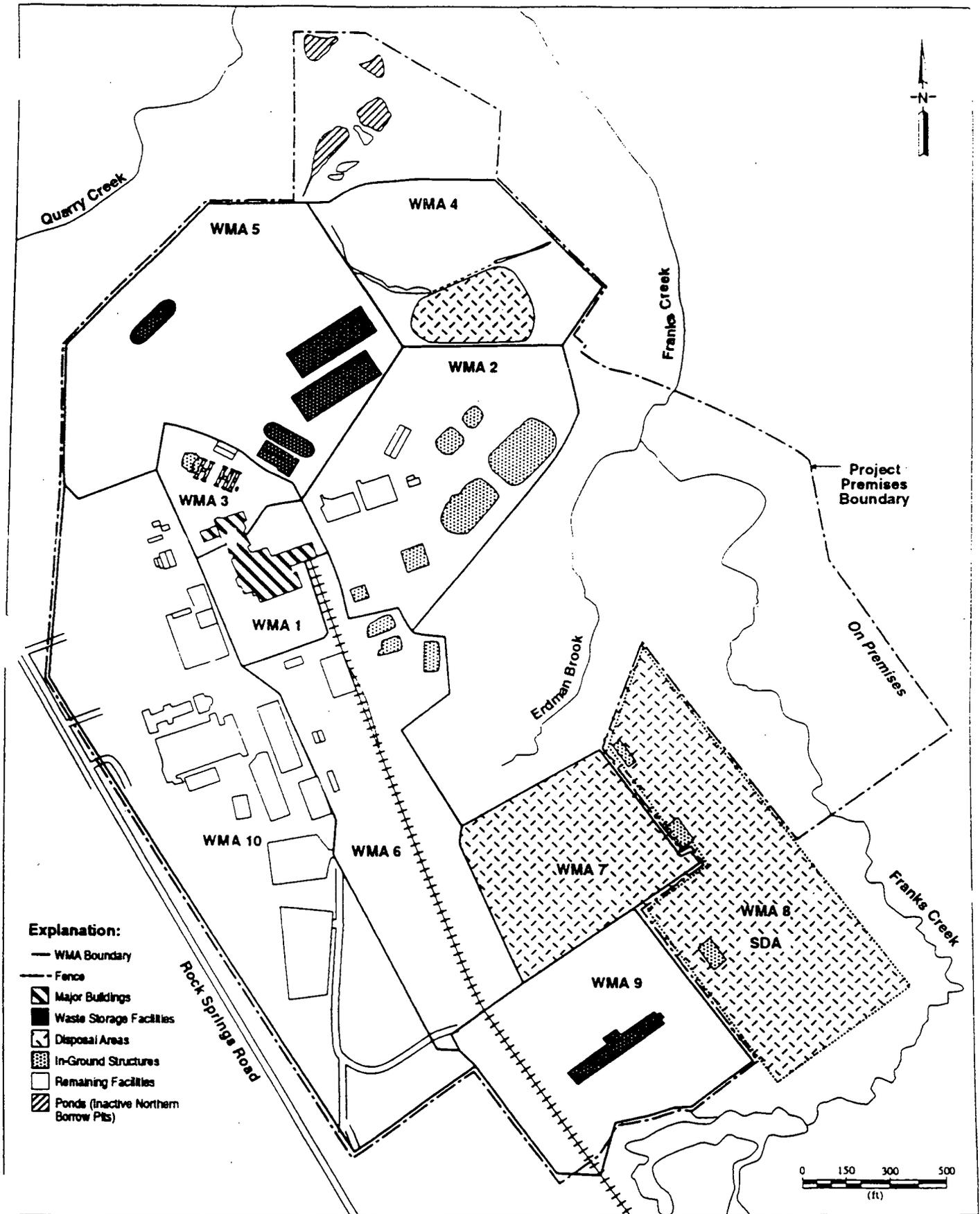
The WVDP Act directs DOE to solidify, transport, and dispose of the HLW at the site. It also directs DOE to dispose of low-level waste (LLW) and transuranic waste produced by the WVDP, in accordance with applicable licensing requirements, and decontaminate and decommission facilities used for the WVDP, in accordance with requirements prescribed by the U. S. Nuclear Regulatory Commission (NRC). NYSERDA is responsible for site facilities and areas outside the scope of the WVDP Act.

### 3. MEMORANDUM OF UNDERSTANDING

The WVDP Act directed DOE and NRC to enter into an agreement to establish arrangements for NRC's informal review of, and consultation on, the project. On September 23, 1981, NRC entered into a Memorandum of Understanding (MOU) with DOE on the basic policy guidelines and mechanisms for coordinating the informal review and consultation between NRC and DOE. The MOU also established an NRC monitoring program for onsite evaluations of project activities. Currently the NRC monitoring visits occur three times per year.

### 4. STIPULATION OF COMPROMISE

After DOE and NYSERDA began operating the site in 1980, they began onsite disposal of LLW. This action resulted in litigation by the Coalition on West Valley Nuclear Wastes and the Radioactive Waste Campaign. As a result of this litigation, DOE agreed to a settlement called the Stipulation of Compromise, in 1987. The Stipulation of Compromise includes an agreement that DOE initiate a site closure environmental impact statement (EIS) process and designates certain items to be within the scope of the EIS, including onsite LLW disposal. Further details of the EIS, including NRC's involvement (NRC was not a party to the Stipulation of Compromise), are provided in Attachment 3 of this Commission Paper.



**Figure 1. Waste Management Areas 1 through 10.**

## BACKGROUND ON RADIOACTIVE WASTE AT WEST VALLEY AFTER VITRIFICATION OPERATIONS

### 1. INTRODUCTION

A description of the wastes in each Waste Management Area (WMA) identified in the draft environmental impact statement (EIS) is attached. Background information on certain WMAs and on certain types of waste at the site are provided below.

### 2. SPENT NUCLEAR FUEL

Spent nuclear fuel (SNF) in fuel assemblies that were accepted at the facility during operations, but never reprocessed, is currently being stored in a spent-fuel pool. The U.S. Department of Energy (DOE) has taken title to this SNF and has committed to removing it from the site and will dispose of it in the Federal repository. SNF also exists in the former process building in the form of fine particles or possibly as sheared pieces of fuel assemblies. SNF that was damaged in such a way that it could not be reprocessed was also disposed of in a U.S. Nuclear Regulatory Commission (NRC)-licensed disposal area (NDA) (see below, under previous disposals) by the original licensee, Nuclear Fuel Services (NFS). Spent fuel hulls, that contain residual amounts of SNF, and other irradiated and contaminated fuel structural hardware, were disposed of in the NDA and possibly remain in the process building. Spent fuel hulls and hardware fall under the classification of incidental waste, as discussed in the promulgation of 10 CFR Part 50, Appendix F (34 FR 8712).

### 3. HIGH-LEVEL WASTE

There is liquid high-level waste (HLW) in four (two 750,000-gallon and two 13,500-gallon capacity) underground tanks at West Valley. The majority of the approximately 600,000 gallons of liquid HLW in these tanks is being incorporated into glass through the vitrification program and will be disposed of as HLW in the repository. Attached to the bottom of the large tanks is a steel grid structure that will make it somewhat difficult to completely remove all of the HLW from the tanks. Therefore, it is assumed that 3 percent (or about 400,000 Ci of Cesium-137, 200,000 Ci of Strontium-90, and 3400 Ci of transuranics) of the original HLW activity in the tanks will remain after vitrification is complete. Possibly, there is also HLW remaining in the process building, from operations. In addition, the components of the vitrification system that had direct contact with the liquid and vitrified HLW are contaminated with residual HLW.

### 4. NDA

During the site's licensed period, more than 4300 m<sup>3</sup> of a wide variety of radioactive wastes were disposed of on the project premises in the NDA. The West Valley Demonstration Project (WVDP) disposed of an approximately equal volume of radioactive wastes in the NDA, between 1981 and 1986 (but with only about 1/1000th of the activity). Most of the waste disposed of by NFS would be considered low-level waste (LLW) or transuranic waste as defined by the WVDP Act, although some of it may be classified as greater-than-class C waste, as defined by 10 CFR Part 61, or SNF (see discussion on spent fuel, above). The waste disposals made during the licensed period were approved by the Atomic Energy Commission.

The disposal of about 185 m<sup>3</sup> of spent fuel hulls took place in the NDA between 1966 and 1973. The acid leaching of the spent fuel from the hulls was an incomplete process that left approximately 0.17 percent of the spent fuel activity in the hulls. In 1969, NFS also disposed of three 30-gallon cans (0.34 m<sup>3</sup> total volume) filled with 42 spent fuel assemblies from the N-Reactor at Hanford. The cladding on the spent fuel was too badly damaged to permit reprocessing. The spent fuel and spent fuel hulls were disposed in 50- to 70-foot-deep shafts in glacial till. NFS also disposed of about 4300 m<sup>3</sup> of a wide variety of other wastes from the reprocessing plant in the NDA. The table below shows the NDA source term characteristics of the NFS disposals.

Table. NDA Source Term Characteristics of NFS Disposals

Waste Category	Volume		Fission Product Activity*		Plutonium Mass	
	m <sup>3</sup>	% of Total	Ci	% of Total	Kg	% of Total
Spent Fuel	0.34	0.008	7,100	15	0.8	15
Leached Hulls	185	4	38,000	81	3.7	67
Rest of NDA	4,115	96	1,900	4	1.0	18
Total NDA	4,300	100	47,000	100	5.5	100

\*Sr-90 and Cs-137 activity adjusted to present day.

#### 5. State-Licensed Disposal Area (SDA)

The SDA is adjacent to the project premises but not part of the WVDP. The SDA was a pre-Part 61 LLW disposal area, run by NFS, that disposed of LLW from the NFS operations and also accepted outside LLW for disposal. As the name implies, the SDA is licensed by the State and the responsibility for regulating the closure of that facility lies with the State. Because of the proximity of the SDA to the project premises, it is being evaluated as an area whose environmental impact must be considered in combination with the rest of the facility, in the EIS.

#### 6. REMAINDER OF THE SITE

The remainder of the site includes buildings, structures, groundwater, soils, and sediments that were contaminated during operations, and from operational occurrences.

## WMA 1 -- Process Building Area

Radiologically-contaminated facilities: (in order of greatest to least contamination)

### Process Building:

- Was used to recover uranium and plutonium from irradiated reactor fuel. Houses evaporators for the liquid waste treatment system. Will be used to temporarily store solidified high-level waste (350 borosilicate glass containers) generated by the vitrification facility
- Thought to be the source of the contaminated groundwater plume in the north plateau
- Most radiological contamination is concentrated in a few central, interior cells (rooms) that handled fuel
- Total inventory of the building is:
  - 3,040 Ci Sr-90
  - 3,400 Ci Cs-137
  - 1,100 Ci Pu-239
  - 7,900 Ci Pu241
  - (inventories of other nuclides are less than 65 Ci)
- Inventory of the 350 borosilicate canisters is:
  - 10,150,000 Ci Cs-137
  - 9,450,000 Ci Sr-90
  - 119,000 Ci Am-241
  - 105,000 Ci Pu-241
  - (inventories of other nuclides range from 1,000 to 9,500 Ci)
- Residual surface contamination will be present on floors and walls

### 01/14 Building:

- Houses ventilation equipment and the cement solidification system
- Residual contamination will be inside equipment (less than 0.2 Ci)

## WMA 2 – Low-Level Waste Treatment Facility Area

Radiologically-contaminated facilities: (in order of highest to lowest contamination)

### 02 Building:

- Houses processing equipment used for treating liquid
- Surface contamination will be present on walls and floors and inside process equipment and piping
- Inventory less than 10 Ci, mostly Sr-90 and Cs-137

### Deactivated Lagoon 1:

- An unlined pit that was constructed in the sand and gravel layer which held up to 300,000 gallons of liquid waste. Lagoon 1 was deactivated by transferring liquid waste to lagoon 2, filling with debris, some of which was contaminated, and covering it with a clay cap and topsoil
- More than 99% of the contamination is in the original sediment; the remaining contamination is in the debris and clay cap
- Inventory is:
  - 100 Ci Cs-137
  - 260 Ci Pu-241
  - 24 Ci Sr-90(inventories of other nuclides are less than 10 Ci)

### Contaminated Groundwater Plume in the North Plateau

- Most is in WMA 2, some in WMAs 1 and 4. Refer to Section C.3.2.2 and Figure C-13.
- The contaminated groundwater plume is in the sand and gravel layer and is contaminated with Sr-90; the plume extends from the process building (possible source of contamination) (WMA 1) to the drainage ditch north of the CDDL (WMA 4)
- Maximum concentration in groundwater is 1,000,000 pCi/L
- Maximum concentration in soil is 6,300,000 pCi/g

## WMA 2 – Low-Level Waste Treatment Facility Area (continued)

### Lagoon 2:

- An unlined pit constructed in the sand and gravel layer which holds up to 2,400,000 gallons of low-level radioactive wastewater from all site activities.
- Contamination is present in the bottom sediment.
- Inventory is:
  - 6.1 Ci Cs-137
  - 5.8 Ci Sr-90
  - 2.7 Ci Pu-241(inventories of other nuclides are less than 0.05 Ci)

### Lagoon 3:

- An unlined pit constructed in the sand and gravel layer which holds up to 3,300,000 gallons of treated wastewater before discharging to Erdman Brook
- Contamination is present in the bottom sediment. Inventory is less than 1 Ci.

### Lagoon 4 and Lagoon 5:

- Lined lagoons, each of which can hold up to 200,000 gallons of treated liquid effluent from the 02 building before transfer to lagoon 3 and then Erdman Brook
- Contamination is present in the bottom sediment. Inventory of each lagoon is less than 1 Ci.

### Neutralization Pit:

- Concrete storage tank used for neutralizing liquid
- Surface contamination on the walls, floor, and steel liner. Inventory is less than 0.01 Ci (mostly Cs-137 and Sr-90).

### Interceptors:

- Old interceptor is a concrete storage tank used to store contaminated liquids that are greater than effluent standards
- Old interceptor contamination is present in the concrete floor and walls; inventory is less than 0.01 Ci (mostly Cs-137 and Sr-90)
- New interceptors are two concrete storage basins used to hold liquids for sampling
- New interceptor contamination is present in the steel liner; inventory is less than 0.01 Ci (mostly Cs-137 and Sr-90)

## WMA 3 – High-Level Waste Storage and Vitrification Facility Area

Radiologically-contaminated facilities: (in order of highest to lowest contamination)

### High-Level Waste Storage Tanks and Vaults:

- Tanks are made of steel and are housed in underground vaults made of concrete. Tanks 8D-1 and 8D-2 are each located in their own vault. Tanks 8D-3 and 8D-4 are co-located in one vault.
- Tank 8D-1 inventory from residual contamination:

200,000 Ci Cs-137 (from zeolite)  
600 Ci Pu-241  
400 Ci Sr-90  
(inventories of other nuclides are 80 Ci or less)

Tank 8D-2 inventory from 2,400 cubic feet of sludge remaining:

200,000 Ci Sr-90  
200,000 Ci Cs-137  
2,000 Ci Am-241  
1,000 Ci Eu-154  
(inventories of other nuclides are 200 Ci or less)

Tank 8D-3 inventory from residual contamination is about 0.7 Ci

Tank 8D-4 inventory from 45 cubic feet of waste remaining:

1,000 Ci Cs-137  
900 Ci Sr-90  
(inventories of other nuclides are 10 Ci or less)

### Vitrification Facility:

- Contains processing equipment that will be used to convert the liquid HLW in Tanks 8D-2 and 8D-4 into borosilicate glass
- Residual contamination will be present in the melter and off-gas scrubber

**WMA 3 – High-Level Waste Storage and Vitrification Facility Area  
(continued)**

Inventory in melter is:

6,000 Ci Cs-137  
5,000 Ci Sr-90  
(inventories of other nuclides are 70 Ci or less)

Inventory in off-gas scrubber is:

1,000 Ci Cs-137  
100 Ci Sr-90  
(inventories of other nuclides are less than 10 Ci)

## WMA 4— Construction and Demolition Debris Landfill

### Construction and Demolition Debris Landfill:

- A 1.5-acre landfill excavated into the sand and gravel layer; does not have a liner.
- Was used for burying nonradioactive construction, office, and shop waste (about 235,000 cubic feet), but the waste and intermingled soil (about 557,000 cubic feet) has become radioactively contaminated as a result of contact with the contaminated groundwater plume in the north plateau which originated from the process building).
- Gross beta concentrations that would be present in the landfill (year 2000) are estimated to be 10,000 pCi/L.

## WMA 5- Waste Storage Area

### Lag Storage Building and Lag Storage Additions 1, 3, and 4:

- These buildings store packaged Class A, B, C, and GTCC waste and mixed waste resulting from operations, decontamination, maintenance, and construction activities
- Approximately 454,000 cubic feet of waste would be present
- Inventory of lag storage building and lag storage additions would be:
  - 1,560 Ci Cs-137
  - 1,450 Ci Sr-90
  - 820 Ci Pu-241(inventories of other nuclides are less than 87 Ci)

### Chemical Process Cell Waste Storage Area (CPC WSA):

- Stores packaged Class A, B, C, and GTCC waste which consists of contaminated steel equipment that was removed from the CPC in the process building
- Approximately 27,700 cubic feet of waste is present
- Inventory of waste is:
  - 200 Ci Cs-137
  - 200 Ci Sr-90
  - 200 Ci Pu (all isotopes)

### Foundation of Dismantled Lag Storage Addition 2:

- 2,600 cubic feet of concrete footings and crushed stone; was used to store slag produced during solidification of radioactive waste

### Cesium Prong

- Most is in WMA 5, some in WMAs 3 and 4. Refer to Section C.3.4.1 and Figure C-15).
- This area is surface soil contaminated with Cs-137 resulting from reprocessing plant ventilation system failures.
- 95% of the contamination is in the top 4 inches of soil:
  - Maximum onsite concentration is 80 pCi/g Cs-137
  - Maximum offsite concentration is 30 pCi/g Cs-137
- Contaminated material is estimated to be 2,600 cubic feet of low-level waste.

### Uncontaminated facilities:

Hazardous Waste Storage Lockers (used for short-term storage of hazardous wastes)

## WMA 6-- Central Project Premises

### Radiologically-contaminated facilities:

#### North and South Sludge Ponds:

- Are unlined basins excavated in the sand and gravel layer that received site wastewaters
- Contamination is present in the sediment of both ponds

#### Cooling Tower:

- Houses equipment for cooling the process building
- Contamination is present on the tower stairs and nearby soil

#### Rail Spur:

- Connects main railroad to the process building for receiving spent nuclear fuel; is not currently in use
- There is contaminated soil along a 100-foot length of track

#### Proposed Contaminated Soil Consolidation Area:

- Not yet built, but planned to consist of a lined pad with a leachate collection system
- Will store up to 216,000 cubic feet of uncontainerized soil, covered with a tarp

### Uncontaminated facilities:

#### Effluent mixing equalization basin

- Lined basin in sand and gravel layer that received site wastewaters and is used for a settling pond

#### Old warehouse

- Stores parts, equipment, supplies, and has office space

#### Sewage treatment plant

- Uses eight tanks for treating sanitary wastewater

#### Incinerator

- Was used in the past to burn non-contaminated solid waste

## WMA 7-- NRC-Licensed Disposal Area and Associated Facilities

### Radiologically-contaminated facilities:

#### Nuclear Fuel Services (NFS) and WVDP Disposal Areas:

- Constructed in the clayey glacial till
- NFS area was used by NFS for disposing radioactive wastes from fuel reprocessing and associated activities, such as decontamination and decommissioning; waste is disposed in holes, including 239 holes.
- WVDP area was used for disposing WVDP waste, which consisted of decontamination and decommissioning waste from cleanup activities; waste is disposed in two trenches and four caissons. Trenches had liners and caps.
- Approximately 190,000 cubic feet of waste was disposed at the NFS area, and approximately 200,000 cubic feet of waste was disposed at the WVDP area
- Inventory of all waste is:
  - 47,000 Ci Cs-137
  - 29,000 Ci Sr-90
  - 30,000 Ci Co-60
  - 32,600 Ci Pu (all isotopes)
  - 10,000 Ci H-3(inventories of other nuclides are 1,000 Ci or less)
- Approximately 740,000 cubic feet of soil was used as fill and may have become contaminated from being intermixed with the waste
- Approximately 935,000 gallons of leachate could be present in the holes and trenches; maximum gross alpha concentration is 0.01  $\mu\text{Ci/mL}$  and maximum gross beta concentration is 0.1  $\mu\text{Ci/mL}$

#### Trench Interceptor Project:

- Consists of a 12 to 16-foot deep trench along the northeast and northwest boundaries of the disposal area to intercept contaminated groundwater migrating from the NDA
- Trench is connected to a liquid pretreatment system, consisting of seven tanks used for holding, prefiltration, activated carbon treatment, and post-filtration holding (this system has never been used)
- Some areas of the trench could be contaminated

#### Interim Waste Storage Facility:

- Stores liquid mixed wastes (estimated to be mixed LLW); also stores liquid wastes that could be radioactive only, non-contaminated, or recyclable pending evaluation and transfer
- Stored volume fluctuates, but is about 1,500 cubic feet

## WMA 7- NRC-Licensed Disposal Area and Associated Facilities (continued)

### Hardstand:

- Three-sided structure with cinderblock walls on a pad of crushed rock; was used to stage radioactive waste before disposal in the NDA
- Material is assumed to be contaminated

### Inactive Leachate Transfer Line:

- Transferred leachate from the pumphouse near the NDA to the LLWTF; has been taken out of service
- Has low levels of radioactive contamination

### Former Lagoon:

- Collected surface water runoff, but was filled with contaminated soil

## WMA 8— State-Licensed Disposal Area and Associated Facilities

### Radiologically-contaminated facilities:

#### Disposal Trenches:

- LLW is disposed in 14 trenches, generally consisting of special purpose reactor wastes, commercial power reactor wastes, nuclear fuel cycle waste, institutional wastes, isotope production wastes, and industrial wastes
- Approximately 2,400,000 cubic feet of waste was disposed in the trenches
- Inventory of disposed waste is:
  - 40,000 Ci Cs-137
  - 31,000 Ci Sr-90
  - 62,265 Ci Pu (all isotopes)
  - 16,000 Ci Co-60
  - 1,600 Ci H-3(inventories of other nuclides are 270 Ci or less)
- Approximately 1,900,000 cubic feet of soil was used as fill and may have become contaminated from being intermixed with the waste
- Approximately 2,100,000 gallons of leachate could be present in the holes and trenches; maximum concentrations of key nuclides are 2,000,000 pCi/L H-3, 500 pCi/L Cs-137, and 5,000 pCi/L Sr-90.

#### Three Filled Lagoons:

- The northern and southern lagoons were unlined and collected leachate pumped out of the SDA trenches; the lagoons were closed by backfilling and capping with clay material
- The inactive lagoon was unlined and also collected leachate pumped out of the SDA trenches; the lagoon was closed by installing a liner and backfilling with native clay
- Approximately 5,000 cubic feet of contaminated sediment is expected to be present

#### Mixed Waste Storage Facility:

- Comprises three tanks that will be used to store leachate pumped from trench 14
- Residual contamination would be present in the tanks

## WMA 9-- Radwaste Treatment System Drum Cell

### Radiologically-contaminated facilities:

#### RTS Drum Cell:

- Stores containers of cement-solidified radioactive waste on concrete blocks on crushed stone, underlain by geotextile and clay
- The stored volume is approximately 21,500 containers, or about 1,526,500 gallons of waste
- Inventory of stored waste is:
  - 1,000 Ci Cs-137
  - 1,000 Ci Sr-90
  - 4,000 Ci Tc-99
  - 3,400 Ci Pu (all isotopes)
  - (inventories of other nuclides are 10 Ci or less)

## WMA 10— Support and Services Area

### Radiologically-contaminated facilities:

None

### Uncontaminated facilities

OB-1 office building

New warehouse (stores supplies, chemicals, industrial waste, and lead)

Administration building and 73 office trailers

Parking lots

Expanded laboratory (environmental laboratory and analytical annex)

Two security gate houses

Two meteorological towers

## WMAs 11 and 12 on the Balance of the Site

### WMA 11

#### Radiologically-contaminated facilities:

None

#### Uncontaminated facilities:

##### Bulk storage warehouse

- Stores furniture, supplies, and equipment

##### Scrap material landfill

- Trench where uncontaminated construction and demolition debris was disposed

##### Test wells

- Injection well and monitoring wells

### WMA 12

#### Radiologically-contaminated facilities:

None

#### Uncontaminated facilities:

##### Old schoolhouse

- Used as a training center

##### Live firearms range

##### Borrow pits

##### Gravel pit quarries

##### Two earthen dams and two reservoirs

## DETAILS OF THE WEST VALLEY ENVIRONMENTAL IMPACT STATEMENT

In 1989, the U.S. Department of Energy (DOE) and the New York State Energy Research and Development Administration (NYSERDA) began to develop the joint environmental impact statement (EIS), to evaluate the environmental impacts of waste disposal and decommissioning alternatives for completion of the West Valley Demonstration Project (WVDP), and closure of the site. DOE funds the EIS project 72 percent and NYSERDA funds the project 28 percent. Because the WVDP Act directs DOE to apply applicable licensing requirements for waste disposal, under U.S. Nuclear Regulatory Commission (NRC) review and consultation, and requires NRC to prescribe decommissioning criteria for the WVDP, NRC entered a cooperating agency agreement with DOE and NYSERDA, to review the EIS. NRC's cooperation in the EIS would support NRC's decisions in prescribing decommissioning criteria. Therefore, NRC avoids the need to prepare a separate environmental evaluation to comply with the National Environmental Policy Act (NEPA) in support of NRC's Federal action in prescribing criteria.

The draft EIS divides the site into 12 waste management areas (WMAs)(see below), some of which are used by the WVDP; others of which are the responsibility of NYSERDA; and some of which are under shared responsibility. Responsibility for decommissioning the various WMAs will be partitioned between DOE and NYSERDA, under a mutual agreement to be negotiated at a later date. A draft EIS was issued in 1996. NRC provided DOE and NYSERDA with extensive comments on the draft EIS. In response to these and other comments, DOE and NYSERDA are preparing a supplement to the draft EIS, to be issued in 1999. DOE and NYSERDA expect to issue a final decision document in mid-2000. The EIS WMAs at the West Valley site are:

- 1 – Process Building
- 2 – Low-Level Waste Treatment Facility
- 3 – High-Level Waste Storage and Vitrification Facility
- 4 – Construction and Demolition Debris Landfill
- 5 – Waste Storage Area
- 6 – Central Project Premises
- 7 – NRC-Licensed Disposal Area
- 8 – State-Licensed Disposal Area (not part of the WVDP)
- 9 – Radwaste Treatment System Drum Cell
- 10 – Support and Services Area
- 11 – Bulk Storage Warehouse and Hydrofracture Test Well Area
- 12 – Balance of Site

Further details about each WMA are provided in Attachment 2 to this Commission Paper.

NRC and other stakeholders had significant criticisms of the draft EIS (i.e., there was no preferred alternative and the EIS assumed permanent institutional control). However, the draft EIS identified four viable alternatives (I-IV) for terminating the WWD and closing the site. They are:

Alt. I - Removal of all waste and residual contamination from the site and release of site, to allow unrestricted use;

Alt. II - Packaging and on-premises storage of all waste and residual contamination, with restricted release;

Alt. III - In-place stabilization of all non-containerized waste and residual contamination and on-premises disposal of previously packaged low-level waste (LLW), with restricted release; and

Alt. IV - No action, with restricted release and monitoring and maintenance.

The estimated cost for each alternative by WMA is in Table 1. The potential onsite dose for one scenario under each alternative, by WMA, is presented in Table 2.

Table 1. Cost in Millions of Dollars by WMA, for the Various EIS Alternatives

WMA	Estimated Cost per EIS Alternative (M\$)			
	Alt. I	Alt. II	Alt. III*	Alt. IV
1	492	345	82-420	152
2	176	69	42-43	159
3	304	185	99-150	189
4	667	195	34	75
5	461	226	115-223	188
7	1860	883	200-209	250
8**	3800	1690	290-345	259
9	144	3	169-178	250
6, 10, 11, 12	573	36	24-28	0.5
Groundwater Plume***	310	250	70	70
Total	8787	3882	1125-1700	1593

\*Alternative III range because of difference between LLW disposal onsite vs offsite.

\*\*Not part of the WWD.

\*\*\*Contaminated ground-water plume that crosses several WMAs.

Table 2. Potential Onsite Doses If Site Restrictions Fail within 1000 Years

WMA	Potential Individual Dose From Each Alternative (rem/yr)			
	Alt. I	Alt. II	Alt. III	Alt. IV
1	0	1,500	380	5,800
2	0	15	220	220
3	0	110,000	.07	1,100,000
4*	0	0	1	1
5	0	1,600	280	1,600
7	0	15,000	NA**	6,500
8	0	17,000	NA**	310
9	0	0.44	.029	0.44
6, 10, 11, 12	0	0	0	.001

\*Includes groundwater plume.

\*\*Scenario assumes that thickness of cover precludes uncovering the waste before 1000 years.

## WEST VALLEY CITIZEN'S TASK FORCE

The New York State Energy Research and Development Administration (NYSERDA), with the participation of U.S. Department of Energy (DOE), formed a Citizens' Task Force (CTF) to assist in the development of a preferred alternative for the completion of the West Valley Demonstration Project (WVDP) and closure of the site. The CTF process was conducted in addition to the public comment process on the environmental impact statement (EIS). The CTF resembled a Site-Specific Advisory Board, as allowed under 10 CFR 20.1403 of the U.S. Nuclear Regulatory Commission (NRC's) "Radiological Criteria for License Termination; Final Rule." The CTF met two evenings per month, from January 1997 to June 1998, to learn about the site and to discuss the various alternatives for completion of the WVDP and closure of the site. NRC participated in these meetings by making periodic presentations and by videoconference.

The CTF's goal was to report recommendations to DOE and NYSERDA, to consider in their decision-making process on the future of the site, and to support the EIS. The CTF finalized its recommendations on July 29, 1998 (see attached). The CTF essentially recommended that all contamination be removed from the site, but recognized that there may be some practical limitations as to the timing of removal, and that whatever waste remains on site in the interim needs to be stabilized and monitored indefinitely. The CTF has also described its concerns for the future of the site in a letter (see attached) to the Honorable Amo Houghton, U.S. Representative from New York's 31st Congressional District, which covers the West Valley site and surrounding area.

West Valley

**CITIZEN  
TASK  
FORCE**

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**West Valley  
Citizen Task Force  
Final Report**

**July 29, 1998**

**West Valley  
Citizen Task Force  
Final Report  
July 29, 1998**

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**Acknowledgments**

*The West Valley Citizen Task Force members wish to acknowledge the participation of two members who were unable to remain with the Task Force until the completion of these recommendations.*

*The Task Force dedicates this Report to the memory of Elaine Belt, who passed away in June 1998. Elaine Belt contributed greatly to the success of the Task Force; her enthusiasm and dedication to the community will be remembered.*

*The Task Force also extends its appreciation to Richard Timm, former Supervisor of the Town of Concord, for his participation and support.*

West Valley  
Citizen Task Force  
Final Report  
July 29, 1998

## I. INTRODUCTION

This report has been prepared and submitted by the West Valley Citizen Task Force ("CTF") to the New York State Energy Research and Development Authority ("NYSERDA") and the United States Department of Energy ("USDOE"), the Site Managers, so as to provide direction and advice on the development of a Preferred Alternative for the completion of the West Valley Demonstration Project and cleanup, closure and/or long-term management of the facilities at the Western New York Nuclear Services Center (hereafter referred to as the Center<sup>1</sup>).

The CTF acknowledges that the vitrification process, which is more than half completed, is of great importance to the overall safety of the Center, human health and the environment. Converting the liquid wastes to a solid and emptying the high level tank will remove a grave risk that has threatened the health and safety of the entire area. The CTF commends the Site Managers and all those who have made this possible.

The CTF expects that the Site Managers will develop a Preferred Alternative which complies with the Policies and Priorities contained in Section III and responds to the Guidelines in Section IV.

The CTF expects the Site Managers to recommend policies and criteria that will offset, ameliorate, or replace the losses to the community from the reduction in economic activity at the Center.

Upon selection of the Preferred Alternative, the CTF expects for the Site Managers to present such alternative to the CTF and the public with all supporting information. Such presentation to the CTF may precede the commencement of a formal public participation process but is not a substitute for full formal public participation and the development of a Record of Decision.

The CTF also expects that the Site Managers will continue to actively manage and monitor the Center during the development of the Preferred Alternative. The CTF further expects that the Site Managers will immediately take any steps necessary to prevent the further spread of wastes.

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<sup>1</sup>The term "Center" refers to the 3300 acres of the Western New York Nuclear Services Center, including the West Valley Demonstration Project (WVDP) premises and the State-licensed Disposal Area (SDA). The term "Site" refers to the 200 acre-WVDP premises and SDA only.

## II. BACKGROUND

On January 29, 1997, the CTF held its first meeting at the Ashford Office Complex. The CTF was convened by NYSERDA and USDOE. The CTF has met twice a month since January 1997, except for short recesses. The members of the CTF are listed in Appendix One.

The CTF was formed to "*assist in the development of a preferred alternative for the completion of the West Valley Demonstration Project and cleanup, closure and/or long-term management of the facilities at the site.*"<sup>2</sup>

Presentations were made to the CTF regarding:

- Center history,
- applicable law, rules and regulations, administrative policies, governmental agreements, and court decisions,
- the draft environmental impact statement and the five alternatives which it considered,
- radiation hazards,
- the twelve waste management areas into which the Center was divided
- licensing issues,
- new or alternative technologies,
- institutional controls, and
- special concerns such as the North Plateau Plume.

## III. CTF POLICIES AND PRIORITIES

1. The CTF expects that the Preferred Alternative will protect human health and the environment from all risks associated with the Center. Because proximity to the Center increases potential risk, the CTF believes that special attention should be paid to the long-term health and safety of people residing in the adjacent towns.

2. The Seneca Nation is an indigenous, distinct, sovereign Nation of People whose past and future existence is dependent upon, among other things, the protection and preservation of its natural resources. Closure options that may contaminate these resources to any extent (i.e., animal and fish life, herbs, plants and forest areas, water, air, and soil, including viable land for home sites), are of overwhelming concern to the Nation and its people. The CTF recognizes this concern.

3. The CTF does not believe (based on currently available information) the Site is suitable for the long term, permanent storage or disposal of long-lived radionuclides (such as carbon-14 with a half life of 5,730 years, uranium-238 with a half life of more than 4 billion years, plutonium-239 with a half life of 24,100 years, and Technetium-99 with a half life of 217,000 years). The site is in an area that has an average rainfall of 40 inches, has a relatively

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<sup>2</sup> Ground Rules of the Citizen Task Force, as revised and approved on January 29, 1997.

high and mobile water table which is hydrologically connected to the surface and perhaps in the future to subsurface aquifers, has sand lenses that are irregularly distributed through the clay on which the site sits, is on or near active earthquake faults and is located on a tributary of Lake Erie. The population density in the area and the large number of people who rely on Cattaraugus Creek, Lake Erie, the Niagara River, and Lake Ontario for drinking water (over one million people for Lake Erie alone), fishing, recreation, etc. is of great concern. The height of the water table, the discharge of groundwater at the site, the surface geological processes at the site (such as erosion) would preclude, under current criteria, the siting of a new nuclear waste storage or disposal facility at this location<sup>3</sup>.

4) The CTF recognizes that portions of the Center are not fully characterized and therefore cannot be judged with certainty to be either suitable or unsuitable for long-term, permanent storage or disposal of wastes under current regulations. Under present conditions, the CTF does not believe that any portion of the Center can be considered suitable for long-term, permanent storage or disposal of wastes. The CTF may reconsider its opinion of site suitability if new evidence based on site characterization is presented to the CTF in the near future.

5. The CTF recognizes that some wastes will remain at the Site for a prolonged period of time. The CTF expects that all decisions regarding such wastes will be guided by the belief that the only appropriate, final action with regard to these wastes is for them to be removed from the Site. The CTF does not believe any solution should be chosen which makes retrieval significantly harder. Thus, for instance, the CTF does not support any alternative in which a large solid, permanent "monolith" would be created.

6. The CTF expects that the logs and remaining fuel rods will be removed from the Site as soon as possible.

7. The CTF expects that, other than to the extent necessary to manage the Center safely and to achieve the Policies and Priorities of the CTF, all wastes that remain at the Site will be managed in a manner to ensure that contamination does not spread and that uncontaminated soils and other materials will be protected from contamination. The CTF does not want to have the amount of material contaminated increase, thus increasing the expense and problems associated with clean up of the Site.

8. The CTF expects that all wastes that remain at the Site, whether stored above or below ground, will be stored in a manner that allows for its monitoring to readily, safely and regularly determine if the materials are leaking or migrating.

9. The CTF expects that all wastes that remain at the Site will be stored in such a way that they can be retrieved if the containment system and/or packaging fails. Retrieval may be

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<sup>3</sup> For instance, see comments of Center for Nuclear Waste Regulatory Analyses, August 1996, *Review of DEIS For Completion of the West Valley Demonstration Project and Closure or Long-Term Management of the Facilities at the Western New York Nuclear Service Center*, beginning at page 3-1.

---

necessary as part of the ultimate disposal plan or due to a gradual (slow erosion) or dramatic (earthquake or rapid erosion from a flood) reduction in the integrity of the containment or packaging system. The CTF expects that an alternative storage system will be developed so as to be readily available should the primary containment system fail.

10. The CTF expects that all wastes will be isolated from ground water. In order to achieve this goal, the CTF acknowledges the slightly higher risk to intruders (trespassers) and site personnel that accompanies the storage of wastes above ground in structures.

11. The CTF prefers that all wastes be excavated and placed in a structure where monitoring and retrieval for repackaging and recontainment, if necessary, will be relatively easy. The CTF recognizes that for some wastes excavation and storage may not be appropriate in the near term. For such wastes the CTF expects that the Preferred Alternative shall describe when and how such wastes shall be excavated.

12. The CTF expects that any structures built in the ground or above the ground at the Site to contain wastes will be constructed to withstand severe natural events such as tornadoes, earthquakes, and the hazards of flooding and erosion.

13. The CTF expects that the risks and costs associated with the Center will be borne in large part by our generation. The CTF wants to limit, as much as possible, the extent to which future generations bear the risks and costs of the Center, and its monitoring and cleanup.

14. The CTF expects that the Preferred Alternative will comply with all applicable local, state, and federal laws, rules, and regulations including the provisions of the West Valley Demonstration Project Act (Public Law 96-368), Article 29 of the New York State Environmental Conservation Law and subparagraph a of paragraph 1 of Section 1854-a of the New York State Public Authorities Law which prohibits the location of a low level waste repository at the Western New York Nuclear Services Center.

15. The CTF expects that the Preferred Alternative will not rely upon man made structures over a long period of time. The CTF believes that over a prolonged period of time nature's processes will prevail over engineered solutions.

16. The CTF expects that the Preferred Alternative will include the restoration of the Center to alternative uses (such as educational, industrial, commercial or recreational uses) as much as is possible and as soon as possible.

17. The CTF expects that cost considerations will not be a primary factor in the development of the Preferred Alternative.

18. The CTF expects that the Preferred Alternative will provide for a continuing presence by USDOE so long as Project wastes as defined by the West Valley Demonstration Project Act remain at the Center. As such, USDOE will continue to participate in the management of the Center and in the funding of activities associated with implementation of the

Preferred Alternative. In addition, the CTF requests that USDOE remain on the Center so long as any waste remains at the Center, especially waste from federal defense activities and from federal research, development and defense contracts.

#### IV CTF GUIDELINES FOR PREFERRED ALTERNATIVE

1. The Preferred Alternative shall to the maximum extent possible achieve the CTF Policies and Priorities contained in Section III of this report.

2. The Preferred Alternative shall state the applicable law(s) under which it has been developed, and if the Preferred Alternative complies with such law(s). In particular, the Preferred Alternative shall indicate if the "decontamination and decommissioning" requirements of the West Valley Demonstration Project Act<sup>4</sup> will be achieved.

3. The Preferred Alternative shall detail all licensing issues including a statement of any licenses that will be required, the standards that will apply and if the Preferred Alternative complies with current licensing requirements. In addition, the Preferred Alternative shall indicate if any special variances or special licensing issues will be sought. In particular, the Preferred Alternative shall indicate if policies of the Nuclear Regulatory Commission regarding reliance upon "institutional controls" can be achieved.<sup>5</sup>

4. The Preferred Alternative shall detail the role of other state and federal agencies including New York State Department of Environmental Conservation (NYSDEC), NYS Department of Health (NYSDOH), NYS Department of Labor (NYSDOL), and Army Corps of Engineers.

5. The Preferred Alternative shall detail the extent to which "institutional controls" and "active maintenance" will be relied upon and shall identify the associated specific actions.<sup>6</sup> This shall include the extent to which a continued human presence at the Center is required to provide monitoring, site control and restoration of protective features.

6. The Preferred Alternative shall detail the extent to which structures and other engineered solutions are relied upon. The Preferred Alternative shall not use incineration at the Center.

7. The Site Managers shall indicate when the logs, rods and other materials that are the results of the vitrification process will be removed from the Site. This shall include who is

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<sup>4</sup> Public Law 96-368- October 1, 1980, Section 2(a)(5)

<sup>5</sup> See 10CFR§20.1403(e) and §61.59(b)

<sup>6</sup> See West Valley Draft EIS, January 1996, Glossary, page A-9 and 10CFR§61.2.

responsible for the removal action, what steps will be taken to insure removal in a timely fashion and how and where these wastes will be stored until removal. The Site Managers shall indicate if this schedule will affect the development and implementation of any alternative.

8. The Preferred Alternative shall provide a detailed statement of how the costs and responsibilities for implementing the Preferred Alternative will be divided between the Site Managers. This shall include a statement of who will be responsible for management of the Center, statutory authority for such management activities, and who will be responsible for the costs of implementing the Preferred Alternative and for long term management of the Center, and for all future funding including but not limited to planned and emergency remedial and removal actions and for insuring compliance with the CTF Policies and Priorities and Guidelines.

9. The Preferred Alternative shall provide a reliable method to assure that funding will be available whenever necessary, but particularly over the long term, to carry out all remediation, relocation (pending appropriate environmental review) on Center premises, monitoring, institutional controls, and removal.

10. The Preferred Alternative shall provide a reliable method of review and implementation to assure that all issues are reopened at regular intervals and to monitor the success at achieving the goal of eventual removal of all wastes from the Site. This method, or "trigger," to cause a review and appropriate action should be automatic after the passage of a certain time period and also discretionary if circumstances at the Center change or new technology is developed.

11. The Preferred Alternative shall specify how immediate or emergency issues will be dealt with such as the sudden deterioration of protective features, the migration of the North Plateau Plume and other issues that require prompt action. This shall include a statement of who will be responsible for decision making, statutory authority for such decision making, and in what way there will be readily available funds to carry out any action that may be required.

12. The Preferred Alternative shall specify the extent to which local emergency response will be required over the long and short term. If emergency response is required, the Preferred Alternative shall state the extent to which it will be required and identify a source of funding to acquire and maintain equipment and to provide the necessary training and planning for emergency response.

13. The Preferred Alternative shall specifically detail a comprehensive plan for addressing the North Plateau Plume, including the source area, and shall clearly establish the authority under which the plan will be implemented over the long term.

Respectfully Submitted,

July 1998

## West Valley Citizen Task Force Members

  
Pete Cooney

  
Bill King

  
Nevella McNeil

  
Joseph Patti

  
John Pfeffer

  
Blake Reeves

  
Murray Regan

  
Lana Redeye

  
Pete Scherer

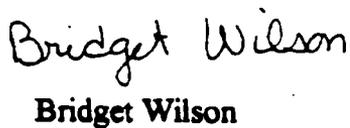
  
Warren Schmidt

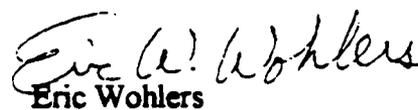
  
Tim Siepel

  
Larry Smith

  
Richard Tobe

  
Ray Vaughan

  
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## APPENDIX 1

CTF Membership

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AT THE SPECIAL SESSION OF COUNCIL THE  
SENECA NATION OF INDIANS HELD ON JULY  
23, 1998, AT THE G.R. PLUMMER BUILDING  
ON THE ALLEGANY INDIAN RESERVATION,  
SALAMANCA, NEW YORK 14779

**EXECUTIVES PRESENT:**

PRESIDENT  
CLERK  
TREASURER

MICHAEL W. SCHINDLER  
GERALDINE HUFF  
RAE L. SNYDER

---

**WEST VALLEY TASK FORCE / APPROVAL**

Motion by Lanny Bennett, Seconded by Karen Bucktooth, that Tribal Council approve the following resolution:

WHEREAS, the Seneca Nation of Indians has a vested interest in the future of the West Valley Nuclear Services Center; and

WHEREAS, Lana Redeye was appointed to represent the Seneca nation of Indians at the west Valley Citizen Task Force; and

WHEREAS, the Citizen Task Force Draft Report incorporates the viewpoints and concerns of the Seneca Nation and its people, provided the following additions are made to Section III item 2:

The Seneca Nation is an indigenous, distinct, sovereign Nation of People whose past and future existence is dependent upon, among other things, the protection and preservation of its natural resources. Closure options that may contaminate these resources to any extent (i.e., animal and fish life, herbs, plants, forest areas, water, air, and soil, including viable land for home sites) are of overwhelming concern to the Nation and its people. The CTF recognizes this concern.

SPECIAL COUNCIL SESSION  
JULY 23, 1998  
PAGE 2

WEST VALLEY TASK FORCE / APPROVAL, (CONTINUED)

NOW, LET IT BE RESOLVED, that the Seneca Nation of Indians concurs with the policies, procedures and guidelines contained in the Citizen Task Force Draft Report and authorizes Lana Redeye to sign the report as the Seneca Nation's representative.

ALL IN FAVOR

MOTION CARRIED

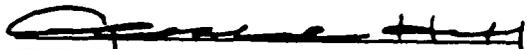
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CERTIFICATION

I hereby certify the foregoing extract is a true and correct copy from the minutes of the Special Session of Council of the Seneca Nation of Indians held on the Allegany Indian Reservation, original of which is on file in the Clerks Office of the Seneca Nation of Indians.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and cause the seal to be affixed at the William Seneca Administration Building on the Cattaraugus Indian Reservation, Irving, New York on the 28th day of July 1998.

ATTEST:



GERALDINE HUFF, CLERK

THE SENECA NATION OF INDIANS

( S E A L )

*West Valley*

# CITIZEN TASK FORCE

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May 6, 1998

The Honorable Arno Houghton  
United States House of Representatives  
Washington, DC 20515

Dear Representative Houghton:

The West Valley Citizen Task Force (CTF) Members thank you for taking the time to talk with us via video conference on the evening of April 21, 1998. We also appreciate your generous offer of holding an additional video conference with our group in the future.

The CTF shares your praise of the current success of the high-level waste vitrification at the West Valley Demonstration Project. The CTF's mission is to provide recommendations to the U. S. Department of Energy (DOE) and the New York State Energy Research and Development Authority (NYSERDA) concerning the cleanup, closure and/or long-term management of the facilities at the site (**after vitrification**). This work will involve decontamination and decommissioning of the facilities at the site and management of the wastes resulting from the WVDP and the wastes disposed of at the site before the WVDP when the site operated during the 1960s and 1970s.

Consistent with our mission, the CTF has spent the last year and a quarter focusing on the residual contamination that will remain after the vitrification process is complete. This includes wastes in the underground high-level waste storage tank; the main processing plant that is highly contaminated with radioactive materials; two below-ground radioactive waste disposal areas; a plume of radioactive contaminated groundwater; radioactive waste-water lagoons; and the waste storage and handling areas at the site.

As you know, a draft Environmental Impact Statement (DEIS) was prepared and issued in March 1996 for public review. The DEIS analyzed the environmental implications of five clean-up options for the remaining wastes (**after vitrification**) and facilities at West Valley. Attached is a fact sheet that clearly shows the magnitude of the clean-up options. For example, the option of leaving the wastes in place (monitoring and maintenance) would cost \$17 million to implement (over a five year period) plus \$30 million a year in perpetuity. On the other hand, to be able to release the entire site for unrestricted use, it would cost more than \$8 billion over about a 25-year period to totally remove all radioactive wastes and facilities and sending them elsewhere for disposal.

The CTF has reviewed the cleanup options for various facilities and wastes at the site and is preparing a report of our recommendations to be used by DOE and NYSERDA in their decisions regarding the future of the site. Our interest in seeking your input on this matter concerns the uncertainty of future funding or resources for the necessary long-term maintenance of the site if radioactive waste remains. This concern stems from the fact that radioactive materials with long half-lives that are buried on the site present a future risk if they escape into the environment through erosion or other natural forces. It is clear to the CTF that wastes will remain at the West Valley site at least over the short term and active oversight and maintenance will be needed. The CTF would like to see a Federal Government presence or funding to assist New York State.

We also appreciate your initiative in examining the following issues as discussed at our meeting:

- the responsibility for wastes remaining at the site (including the North Plateau Groundwater Plume); and
- the percentage of federally-generated waste that is present in the State-Licensed Disposal Area.

The CTF recommendations report will be sent to you when it is completed, prior to our next video conference with you. The CTF appreciates your willingness to work with us on this very important matter.

Sincerely,

West Valley Citizen Task Force

cc: M. Holland (Clean Sites)  
P.L. Picjulo (NYSERDA)  
T.J. Rowland (DOE)

Enclosure

**Summary of Alternatives**

**Environmental Impact Statement for  
Completion of the West Valley Demonstration Project and  
Closure of Facilities at the Western New York Nuclear Service Center**

<b>ALTERNATIVE</b>	<b>DESCRIPTION</b>	<b>DURATION OF IMPLEMENTATION</b>	<b>COST (1996\$)</b>
<b>I. Removal</b>	Remove waste, structures, and contamination such that there are minimal remnants from nuclear operations. All wastes disposed off site.	26 Years	\$8.4 Billion
<b>II. On Premises Storage</b>	Remove waste, structures, and contamination such that there are minimal remnants from nuclear operations. Store these materials in a new on site waste storage facility.	28 Years	\$3.7 Billion (to implement) \$2.8 Million (annually thereafter)
<b>IIIa. In-Place Stabilization Backfill</b>	Contaminated structures and buried wastes are stabilized in-place. Process building and vitrification cell are backfilled with concrete and waste generated is entombed inside.	10 Years	\$400 - \$500 Million (to implement) \$11 Million (annually thereafter)
<b>IIIb. In-Place Stabilization Rubble</b>	Contaminated structures and buried wastes are stabilized in-place. Process building and vitrification cell are reduced to a rubble pile and capped. Waste generated is disposed in a new on-site disposal facility.	26 Years	\$990 Million to \$1.1 Billion (to implement) \$11 Million (annually thereafter)
<b>IV. Monitor and Maintain</b>	Manage site as-is and provide long-term monitoring and maintenance. Minimal actions taken to facilitate long-term monitoring and maintenance.	5 Years	\$17 Million (to implement) \$30 Million (annually thereafter)
<b>V. Discontinue Operations</b>	No remedial actions taken. Site is abandoned.	Assumes abandonment in the year 2000	No implementation or annual maintenance costs



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

AUG 18 1987

Dr. Willis W. Bixby, Director  
West Valley Project Office - Idaho Operations  
U.S. Department of Energy  
P.O. Box 191  
West Valley, New York 14171

Dear Dr. Bixby:

The NRC staff has received a copy of the Compromise Settlement (Settlement) between the Coalition and DOE. This letter presents our position on the 10-100 nCi/gm issue discussed in the Settlement (Enclosure 1).

As we read the Settlement, DOE is to seek a determination or prescription from the NRC as to whether waste material which contains elements having an atomic number greater than 92 in concentrations greater than 10 nCi/gm but less than or equal to 100 nCi/gm are transuranic wastes or low-level wastes within the meaning of the West Valley Demonstration Project Act (Act). I would like to outline our position concerning the disposal of wastes contaminated with transuranic (TRU) radionuclides.

An affidavit (Enclosure 2, p. 42) submitted by Robert Blickwedehl, engineer for the contractor to DOE at West Valley, describes the reason for treating wastes contaminated with transuranic radionuclides in concentrations greater than 10 nCi/gm but less than or equal to 100 nCi/gm as low-level waste. Mr. Blickwedehl bases this position on Section 6 (5) of the Act, which states:

The term "transuranic waste" means material contaminated with elements which have an atomic number greater than 92, including neptunium, plutonium, americium, and curium, and which are in concentrations greater than 10 nanocuries per gram, or in such concentrations as the Commission may prescribe to protect the public health and safety.

Mr. Blickwedehl cites (Enclosure 2) the NRC's promulgation of 10 CFR Part 61 and the publication of the supporting environmental impact statement (EIS) for 10 CFR Part 61 as the NRC prescription, pursuant to Section 6 (5) of the West Valley Demonstration Project Act, for TRU concentration limits for West Valley Demonstration Project wastes (Project wastes).

We are not ready at this time to endorse the applicability of the Part 61 waste classification system to Project wastes. The waste classification system in 10 CFR Part 61 contains radionuclide concentration limits that apply to commercial wastes and some federally-generated wastes. These wastes can be disposed of at commercially operated LLW disposal facilities. The upper bound for disposal of commercial wastes that are contaminated with alpha emitting transuranic

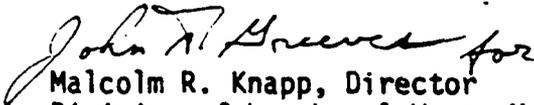
AUG 18 1987

- 2 -

radionuclides with a half-life greater than 5 years is 100 nCi/gm. This limit is not directly applicable to the Project wastes since wastes resulting from the reprocessing of spent fuel were not analyzed as a part of the commercial or federal source term used in the EIS that provides the decision basis for 10 CFR Part 61. Further, the inclusion of TRU radionuclides in the Part 61 waste classification system was not intended to change the character of the TRU contaminated waste to something else. It simply means that NRC has authorized the commercial near surface disposal of TRU contaminated wastes within the Part 61 waste classification limits.

This is not to say that 100 nCi/gm may not be an acceptable concentration limit for the disposal of Project wastes. However, before NRC considers accepting a concentration limit other than 10 nCi/gm for transuranic radionuclides, DOE must conduct additional analyses to support its proposed use of any other concentration limit. While detailed guidance on these analyses are beyond the scope of this letter, the analyses should consider: the specific physical, chemical and radiological properties of the Project wastes; the proposed methods of disposal; and site specific conditions. These analyses should show that the mix of Project wastes expected to be disposed of will meet the performance objectives in Part 61, given the specific concentrations of radionuclides expected in that waste. Project waste disposal should be evaluated against the performance objectives in 10 CFR Part 61 to demonstrate protection of public health and safety. We would be pleased to meet with you to discuss this in greater detail.

Sincerely,

  
Malcolm R. Knapp, Director  
Division of Low-Level Waste Management  
and Decommissioning

Enclosures:  
As stated



U.S. Department of Justice

Enclosure 1  
**RECEIVED**

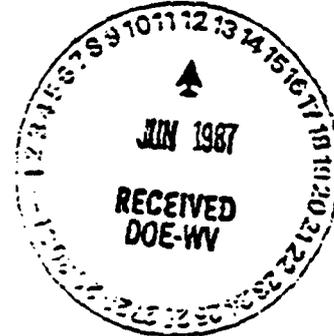
**JUN 01 1987**

United States Attorney  
Western District of New York **OFFICE OF THE CHIEF COUNSEL**

502 United States Courthouse  
Buffalo, New York 14202

(716 846-4811)

May 28, 1987



Brett Bowhan, Esq.  
U.S. Department of Energy  
Idaho Operations Office  
785 DOE Place  
Idaho Falls, Idaho 83402

Greg Fess  
U.S. Department of Energy  
6H-065/FORS, GC-21  
Washington, D.C. 20585

RE: Coalition, et al v. U.S.A.

Gentlemen:

Enclosed please find a copy of the Stipulation of Compromise Settlement which has been signed and approved by Judge Curtin. I anticipate forwarding a copy of the Stipulation dealing with the attorney's fees within the very near future.

Thank you for your attention to this matter.

Very truly yours,

ROGER P. WILLIAMS  
United States Attorney

BY: MARTIN J. LITTLEFIELD  
Assistant United States Attorney

MJL/ds

Enc.

UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF NEW YORK

---

COALITION ON WEST VALLEY  
NUCLEAR WASTES & RADIOACTIVE  
WASTE CAMPAIGN,

Plaintiffs,

-v-

DEPARTMENT OF ENERGY,  
UNITED STATES OF AMERICA,

Defendant

---

CIVIL NO. 86-1052-C

STIPULATION OF COMPROMISE  
SETTLEMENT

WHEREAS plaintiffs have filed this action challenging certain proposed actions of the United States Department of Energy relating to the disposal of low-level radioactive wastes generated from the solidification of high-level radioactive waste, and

WHEREAS plaintiffs and the defendant have met during the course of this litigation in an attempt to resolve through compromise the issues raised in the litigation, and

WHEREAS plaintiffs maintain that the defendants "Finding of No Significant Impact" dated August 6, 1986, which supported approval of disposal of certain radioactive wastes in two facilities situated at the Western New York Nuclear Service Center in West Valley, New York, should be annulled as contrary to the National Environmental Policy Act in that an Environmental Impact Statement (EIS) should have been prepared beforehand, and that

certain radioactive wastes which the defendant intends to dispose of are not "low-level wastes" but are instead "transuranic wastes," and that an EIS should be prepared by a date certain and that judicial review is necessary for other reasons as well, and

WHEREAS the defendant maintains that the Environmental Assessment undertaken which ultimately resulted in a Finding Of No Significant Impact proceeded in a manner within all statutory mandates of the National Environmental Policy Act and the guidelines promulgated thereunder, including those promulgated by the Council on Environmental Quality,

WHEREAS the defendant during discussions with plaintiffs, has made representations to the plaintiffs based on preliminary evaluations done by the defendant in good faith, which the plaintiffs utilized in arriving at this settlement. Those representations are as follows:

- a. should the Class B/C wastes have to be moved from the existing emplacement as a result of the Environmental Impact Statement, it is estimated that there would be minimal occupational radiation doses associated with such potential future movement of the stored Class B/C wastes which would be further evaluated during the Environmental Impact Statement process; and
- b. the defendant estimates that the costs of construction at the tumulus location for emplacement purposes is approximately \$2,000,000 and the costs of converting the storage facility into a tumulus as approved by defendant is approximately \$18,000,000.

WHEREAS, each of the parties is desirous of resolving this lawsuit so that one of the foremost objectives of the West Valley Demonstration Project Act can be met, that is, the immobilization of the liquid high-level radioactive waste located at the Western New York Nuclear Service Center (hereinafter referred to as "Center"), and

WHEREAS, the parties desire to avoid extended litigation and concomitant delay to the West Valley Demonstration Project and the parties further desire to advance the best interests of the public health and safety in light of the high-level nuclear wastes located at the Center, now

IT IS HEREBY STIPULATED AND AGREED by and between the plaintiffs, Coalition on West Valley Nuclear Wastes & Radioactive Waste Campaign, and the defendant, United States of America and the United States Department of Energy, by and through their respective attorneys as follows:

1. As used herein, the term "defendant" shall mean the United States of America and the United States Department of Energy and the term "plaintiffs" shall mean the Coalition on West Valley Nuclear Wastes and the Radioactive Waste Campaign.

2. The parties acknowledge that this agreement shall not constitute an admission of liability or fault on the part of the plaintiffs or the defendant or on the part of their agents,

contractors or employees; this agreement is being entered into so that the best interests of the public and their health and safety can be served by the expeditious solidification of the high-level radioactive wastes located at the Western New York Nuclear Service Center and by the transport of said waste to an appropriate federal repository for permanent disposal in accordance with provisions of the West Valley Demonstration Project Act, Public Law 96-368. The procedures and actions set forth in the provisions of this agreement shall in force and in effect supersede the "Finding of No Significant Impact [FONSI] for Disposal of Project Low Level Wastes", dated August 6, 1986.

3. The Department of Energy had planned to prepare an Environmental Impact Statement concerning closure for the post-solidification phase of the project. The defendant hereby agrees that the scope of that Environmental Impact Statement shall include the following:

a. Disposal of those Class A wastes generated as a result of the activities of the Department of Energy at the West Valley Demonstration Project as mandated by the United States Congress under the West Valley Demonstration Project Act. However, in lieu of undertaking such an EIS, the defendant reserves the right to:

- i. dispose of the Class A wastes in accordance with applicable law at a site other than the Center; or
- ii. evaluate disposal of those Class A wastes in a separate EIS; or

iii. seek and obtain Nuclear Regulatory Commission (NRC) review and approval of any proposed disposal methodology for such Class A wastes at the Center.

b. The disposal of those Class B/C wastes generated as a result of the activities of the Department of Energy at the West Valley Demonstration Project as mandated by the United States Congress under the West Valley Demonstration Project Act.

4. The parties hereby agree that the closure Environmental Impact Statement process -- including the scoping process -- shall begin no later than 1988 and that this process shall continue without undue delay and in an orderly fashion consistent with applicable law, the objectives of the West Valley Demonstration Project, available resources and mindful of the procedural processes (including public input) needed to complete the aforesaid Environmental Impact Statement. The defendant agrees to provide a six (6) month public comment period for the draft EIS.

5. Pending such Environmental Impact Statement, the plaintiffs withdraw and waive any objection or claim concerning immobilization of the Class B/C wastes in a cement form consistent with the applicable Nuclear Regulatory Commission "Technical Position on Waste Form, May 1983, Rev. 9".

6. The plaintiffs withdraw and waive any objection or claim concerning the placement of the solidified Class B/C wastes in the "RTS Drum Cell" already under construction at the West Valley Demonstration Project pending a determination of the disposal of these solidified Class B/C wastes as a result of the Environmental Impact Statement. The Class A and Class B/C wastes shall be retrievably and temporarily stored pending the EIS or in the case of Class A wastes until fulfillment of the alternative disposal provisions under paragraph 3(a), supra.

7. The parties agree that for consideration of any on-site disposal, the defendant in the EIS shall evaluate erosion impacts and erosion control impacts and the need for erosion control measures.

8. While this agreement will not in and of itself subject the Department of Energy to formal NRC procedures, nor to actions required by law for licensed activities, it is hereby agreed that every good-faith effort shall be made to evaluate the site and the design(s) relative to the provisions of 10 C.F.R. §61.50 and §61.51. Similarly, if the Class B/C waste form does not satisfy or meet otherwise applicable NRC regulations and guidelines at the time of the draft Environmental Impact Statement, the defendant agrees that the scope of the Environmental Impact Statement shall

evaluate reasonable additional site suitability and disposal facility design safeguards to provide reasonable assurance that exposures to humans are within regulatory limits and guidelines established by the NRC.

9. The defendant agrees to hold and undertake meetings on a quarterly basis at a location at or near the West Valley Demonstration Project site to which members of the local geographical, educational, scientific and political communities -- including plaintiffs -- shall be invited, so that the defendant can advise such participants of the status of the Environmental Impact Statement process including current results and in order to receive public comment. The meetings shall commence during or prior to the EIS scoping process.

10. The defendant agrees to make available to the plaintiffs at the West Valley Demonstration Project Public Reading Room for public inspection upon reasonable notice, at reasonable hours and without a search charge, those documents requested with reasonable specificity which are reasonably related to the preparation of the EIS for the West Valley Demonstration Project including background information which would be available under a Freedom of Information Act request to the Department of Energy in accordance with the provisions of that Act. Should any person wish to have

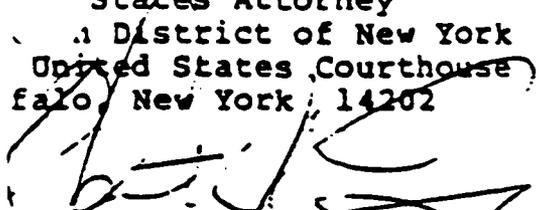
copies, they may have such at nominal charges provided for under the Freedom of Information Act.

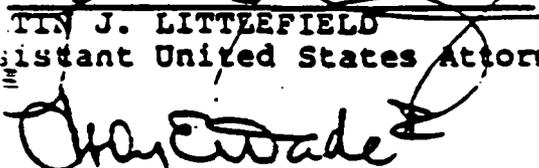
11. The defendant agrees to expeditiously seek and abide by a determination or prescription provided for under the West Valley Demonstration Project Act from the Nuclear Regulatory Commission (NRC) as to whether waste material (other than high-level waste) intended for disposal by the Department of Energy in conjunction with the West Valley Demonstration Project which waste material contains elements having an atomic number greater than 92 in concentrations greater than ten (10) nanocuries per gram but less than or equal to 100 nanocuries per gram, are transuranic wastes or low level wastes within the meaning of the West Valley Demonstration Project Act, Public Law 96-368 for disposal at the Center. For disposal at locations other than the Center, such disposal will be in accordance with applicable law. This determination or prescription shall be binding upon all parties except that plaintiffs reserve their right to seek judicial review of such determination or prescription of the Nuclear Regulatory Commission to the extent that such determination or prescription is arbitrary and capricious, an abuse of discretion or otherwise reviewable as not in accordance with the law.

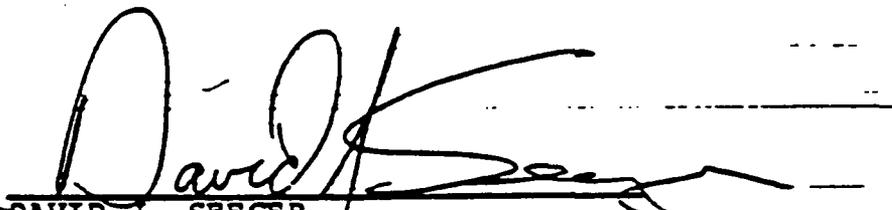
12. The parties agree that this agreement shall fully and finally settle all the claims set forth in the Complaint and shall

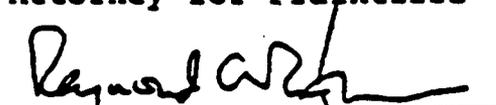
...ding upon the plaintiffs for themselves, their successors or  
 igns and shall release the defendant of liability for all those  
 ims set forth in the Complaint. However, such release is  
 ditioned upon compliance with the terms of this agreement.  
 itionally, it is expressly acknowledged that this agreement is  
 igned to ensure that an EIS process is undertaken in accordance  
 n the terms of this agreement and consistent with applicable  
 . However, the plaintiffs reserve all their rights to  
 llenge the contents of any EIS under applicable law once the  
 process is completed.

EP P. WILLIAMS  
 States Attorney  
 District of New York  
 United States Courthouse  
 falo, New York 14202

  
 TIM J. LITTLEFIELD  
 Assistant United States Attorney

  
 ROY E. WADE, II  
 U.S. Department of Energy  
 Manager, Idaho Operations Office

  
 DAVID J. SEEGER  
 Attorney for Plaintiffs

  
 RAYMOND C. VAUGHAN,  
 ACTING CHAIRMAN  
 On behalf of the Coalition on  
 West Valley Nuclear Wastes

  
 CAROL MONGERSON  
 Vice Chairperson, On Behalf of  
 the Radioactive Waste Campaign

SO ORDERED:  
  
 HONORABLE JOHN T. CURTIN  
 UNITED STATES DISTRICT JUDGE

Dated: May 27, 1987.

74. The current regulatory criteria set by the U.S. Nuclear Regulatory Commission for differentiating between low-level and TRU waste is set forth in Table 1 of 10 CFR 61.55(a)(3), which limits the concentration of "alpha emitting transuranic nuclides with a half life greater than five years," to 100 nanocuries per gram. These regulations were promulgated in 1982. Other agencies of the U.S. government including the DOE use a similar definition of TRU waste.

75. In Section 6(5) of the "West Valley Demonstration Project Act of 1980" (PL 96-368), the congress defined transuranic (TRU) waste as:

"... material contaminated with elements which have an atomic number greater than 92, including neptunium, plutonium, americium and curium, and which are in concentrations greater than 10 nanocuries per gram, or in such other concentrations as the (Nuclear Regulatory) Commission may prescribe to protect the public health and safety."

76. In 1980 when PL 96-368 was enacted the criteria used by the NRC and other agencies for differentiating TRU waste was that the concentration of transuranic isotopes could not exceed 10 nanocuries per gram. This value was derived from a comparison with the naturally occurring element radium.

77. The original draft of the 10 CFR 61 regulations, which were issued in 1981, used the 10 nanocurie per gram limit. During the course of the public comment period of the EIS

for the regulations, numerous commenters on this issue (24 out of 28), including technical societies and state regulatory authorities recommended increasing the limit to 100 nanocuries per gram since it would still provide adequate protection for the health and safety of the workers, intruders or the public (USNRC, 1982).

78. In a separate report issued on February 5, 1982 the National Council on Radiation Protection and Measurements (copy attached hereto (Exhibit I) recommended that the 10 nanocurie per gram limit be abolished in favor of site specific controls based on pathway models (Page 13), which include the PRESTO code (Pages 4 and 5).

79. As a result of the input received, the NRC raised the limit for TRU waste from 10 to 100 nanocuries per gram as is indicated in Section 61.55 of the 10 CFR 61 regulations which were promulgated on December 7, 1982.

80. From the discussion in the above paragraphs it is evident that Congress established the TRU waste criteria in the West Valley Demonstration Project Act on the basis of regulatory criteria and a consensus of the scientific community in effect at the time, but which changed after the legislation was enacted. This is evidenced by the fact that the original draft of the 10 CFR 61 regulations, which was issued a year after the WVDP legislation was enacted, still used the 10 nanocuries per gram limit.

81. In Paragraphs 25 through 30 and 33 through 35 of his affidavit, Dr. Resnikoff presents a series of arguments which are purported to demonstrate that much of the WVDP Class B and C waste is actually TRU waste. Paragraphs 31 and 32 of the Resnikoff affidavit also address this issue, but in relation to disposal of the Class B and C waste. In accordance with the agreement identified in Paragraph 17, the disposal of this waste is no longer in dispute. In the following paragraphs, I will demonstrate why each of these arguments are either baseless, incorrect, a misinterpretation of the facts or based on incomprehensible logic.

82. Re: Paragraph 25 of Resnikoff Affidavit: This paragraph which alleges that much of the WVDP waste is TRU waste is untrue because it is based on the validity of subsequent paragraphs which will be shown to be untrue. The Environmental Assessment did not mislabel transuranic waste as low-level waste.

83. Re: Paragraph 26 of Resnikoff Affidavit: This paragraph quotes Section 6(5) of the WVDP Act which was quoted in Paragraph 68. It is correct to that extent. However, it should be noted that as this quotation from the Act indicates, the Act defines transuranic waste as wastes which contain transuranic isotopes in

"concentrations greater than 10 nanocuries per gram or in other concentrations as the (Nuclear Regulatory) Commission may prescribe to protect the public health and safety." (Emphasis supplied.)

7 m 10

As was demonstrated in Paragraphs 68 through 74, the Nuclear Regulatory Commission and the scientific community changed the definition of transuranic TRU waste to be based on a 100 nanocurie per gram concentration, rather than 10 a nanocurie per gram concentration limit for transuranic radionuclides. Therefore, all of the remaining discussion in Paragraph 26 of the Resnikoff Affidavit is incorrect.

84. Re: Paragraph 27 of Resnikoff Affidavit: Dr. Resnikoff gives the opinion that the DOE substitution of the 10 CFR 61.55 definition of the criteria over the Congressional definition as being arbitrary and capricious. Considering the legislative and regulatory history surrounding this issue as outlined in Paragraphs 68 through 73, it seems perfectly reasonable that the DOE would adopt the NRC's revised definition of transuranic waste for the West Valley Demonstration Project.

85. Re: Paragraph 28 of Resnikoff Affidavit: In this paragraph Dr. Resnikoff alleges that since 10 CFR 61 applies to the siting and designing of facilities for disposal of commercially generated low-level waste, it is not applicable to the West Valley waste. His basis is that 60 percent of the irradiated fuel processed at West Valley came from Department of Energy facilities and therefore is not commercial. This is not a sound technical argument. The potential environmental impact of an atom would be the same whether it originated from a commercial facility or a DOE facility. Therefore, the source of the waste



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

MAR 15 1993

Ms. Jill Lytle  
Deputy Assistant Secretary for Waste Operations  
Office of Waste Management  
Environmental Restoration  
and Waste Management  
U.S. Department of Energy  
Washington, D.C. 20585

Dear Ms. Lytle:

Members of the Nuclear Regulatory Commission staff appreciated the opportunity to meet with the Department of Energy (DOE) staff, DOE contractors, and other parties on July 16, 1992, to review new waste characterization data and current DOE plans for management of radioactive tank waste at Hanford. The purpose of this letter is to provide DOE with the staff's assessment of that information as it relates to DOE's program to classify, process, and dispose of Hanford tank wastes. We are also taking this opportunity to respond to the related November 4, 1992, letter from Leo P. Duffy to Chairman Ivan Selin.

During the meeting, DOE presented revised tank waste inventory estimates, based on current characterization data. The information indicated that the double-shell tank activity that would be grouted in near-surface vaults is within earlier range estimates. The NRC staff is concerned, however, that Cs-137 quantities are now near the upper end of the range, rather than at the lower end, as previously believed, especially given that DOE indicated that uncertainties associated with the activity estimates remain because of the limited sampling and analysis that has been conducted to date. Consequently, we encourage DOE to examine available mechanisms for achieving greater radionuclide separation.

In presenting its current plans for waste management, DOE outlined its intention to complete, by March 1993, a broad reevaluation of various treatment options for both single and double-shell tanks. These options include a new facility to be used to separate radionuclides for repository disposal of high-level radioactive waste (HLW).

As you recall, NRC indicated to DOE, in 1989, its agreement that the criteria DOE used for classification of grout feed as low-level waste were appropriate, and, consequently, that the grout facility for disposal of double-shell tank

waste would not be subject to our licensing authority (R. Bernero, NRC letter to A. Rizzo, DOE, September 25, 1989). This agreement was predicated on our understanding that DOE would segregate the largest practical amount of the total site activity attributable to "first-cycle solvent extraction, or equivalent" for disposal as HLW, leaving behind only a small fraction of moderately radioactive material.

The Commission has recently completed its review of a rulemaking petition from the States of Washington and Oregon on the subject of the double-shell tank wastes and has indicated, in the enclosed petition denial, that it would regard the residual fraction as "incidental" waste, based on the Commission's understanding that DOE will assure that the waste: (1) has been processed (or will be further processed) to remove key radionuclides to the maximum extent that is technically and economically practical; (2) will be incorporated in a solid physical form at a concentration that does not exceed the applicable concentration limits for Class C low-level waste as set out in 10 CFR Part 61; and (3) will be managed, pursuant to the Atomic Energy Act, so that safety requirements comparable to the performance objectives set out in 10 CFR Part 61 are satisfied.

It is therefore essential, in the light of this position, that DOE's present reevaluation of tank waste remediation options, and subsequent periodic evaluations as may be conducted, include the application of these principles. We recognize that there may be significant economic, programmatic, and safety factors affecting the remediation program, but the consideration of such factors as they may relate to the possible jurisdiction of NRC should be made clear.

If, during your periodic evaluations, it becomes apparent to you that any wastes may be subject to NRC licensing, it will be necessary for you to communicate that concern to NRC. It will then be necessary to determine what form of pre-licensing interactions, analogous to repository site characterization, would be needed to define the appropriate disposition of these wastes. We expect that DOE will document the results of the analyses supporting its conclusions and that this documentation will be adequate for an NRC review, should that be appropriate. We believe it would be prudent for any such documentation to be developed with good record-keeping and under an adequate quality assurance process.

I trust that this letter and the enclosed petition denial provide the information requested in Leo P. Duffy's November 4, 1992, letter to Chairman Ivan Selin, regarding NRC's intended response to the rulemaking petition by

Ms. Jill Lytle

3

the States of Washington and Oregon. If you have any further questions, please feel free to contact me, at 301-504-3352, or B.J. Youngblood, Director of the Division of High-Level Waste Management, at 301-504-3404.

Sincerely,



Robert M. Bernero, Director  
Office of Nuclear Material Safety  
and Safeguards

Enclosure  
Petition Denial

cc: J. Tseng, DOE-EM-36  
J. Anttoner, DOE  
L. Barrett, DOE-RW-1  
P. Grimm, DOE-EM-1  
D. Duncan, EPA  
R. Stanley, Washington State  
J. Franco, Oregon State  
R. Jim, YIN

NUCLEAR REGULATORY COMMISSION

10 CFR Part 60

Docket No. PRM-60-4

States of Washington and Oregon: Denial of Petition for Rulemaking

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Denial of petition for rulemaking.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking (PRM-60-4), submitted by the States of Washington and Oregon, which deals with the process and criteria for classifying radioactive waste materials at defense facilities as high-level radioactive waste (HLW) or as non-HLW. (As noted in the petition, certain facilities for the storage of HLW are subject to NRC licensing authority.) The petition is being denied because the NRC concludes that the principles for waste classification are well established and can be applied on a case-by-case basis without revision to the regulations.

**ADDRESSES:** Copies of the petition for rulemaking, the public comments received, and the NRC's letter to the petitioner are available for public inspection or copying in the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC.

FOR FURTHER INFORMATION CONTACT: Naiem S. Tanious, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3878.

SUPPLEMENTARY INFORMATION:

I. The Petition

The States of Washington and Oregon, and the Yakima Indian Nation, initially submitted a petition for rulemaking on this subject on January 2, 1990. On February 7, 1990, the NRC staff conferred with the petitioners as contemplated by Paragraph (b) of 10 CFR 2.802. In response to suggestions by the NRC staff, the petition was clarified and resubmitted (by the States of Washington and Oregon) on July 27, 1990.

On December 17, 1990, the Nuclear Regulatory Commission published a notice of receipt of the petition for rulemaking (55 FR 51732). The petition requested that the Commission revise the definition of "high-level radioactive waste" (HLW) so as to establish a procedural framework and substantive standards by which the Commission will determine whether reprocessing waste, including in particular certain waste stored at the U.S. Department of Energy's (DOE) site at Hanford, Washington, is HLW and, therefore, subject to the Commission's licensing authority.

The petitioners request that the Commission amend 10 CFR 60.2 to clarify the definition of HLW and the definition of "HLW facility." The petitioners specifically request that the Commission:

1. Establish a process to evaluate the treatment of defense reprocessing wastes in tanks so that such wastes will not be considered HLW if, prior to disposal, each tank is treated to remove the largest technically achievable amount of radioactivity; and

2. Require that the heat produced by residual radionuclides, together with the heat of reaction during grout processing (if employed as a treatment technology), will be within limits established to ensure that grout meets temperature requirements for long-term stability for low-level waste forms.

The petitioners state that the petition for rulemaking is based, in part, on Section 202 of the Energy Reorganization Act of 1974 (ERA), which provides for the Commission to exercise licensing and related regulatory authority over "facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive wastes generated by [DOE] which are not used for, or are part of, research and development activities."

According to the petitioners, the legislative history of the ERA reveals that Congress intended the Commission to license defense reprocessing tank wastes at the point of long-term storage or disposal. The petitioners note that "low-fraction wastes" resulting from pretreatment of tank wastes are scheduled to be grouted and disposed of in land-based grout vaults on the Hanford site in accordance with regulations developed under the Resource Conservation and Recovery Act (RCRA). The petitioners believe that if these wastes are HLW, they clearly fall under the Commission's licensing jurisdiction under Section 202(4) of the Energy Reorganization Act of 1974 (42 USC 5842(4)).

The petitioners acknowledge that the present definition of HLW in the Commission's regulations is based upon the source of the waste, and that

"incidental waste" generated in the course of reprocessing is not HLW. (The latter point is evident from the proposal to amend 10 CFR 60.2 to provide that a residual fraction would be "considered an incidental waste and, therefore, not HLW.") The petitioners claim, however, that wastes stored in tanks at Hanford cannot practicably be classified as incidental waste (as opposed to HLW) because the tanks contain a mixture of wastes from a number of sources, including reprocessing of reactor fuel. Moreover, the petitioners state that radionuclide inventories are estimates subject to substantial uncertainty, owing to lack of accurate records. Further, the petitioners assert that neither DOE, the Commission, nor the petitioners have adequate information regarding the source and composition of the tank waste. Hence, the petitioners believe that the Commission needs to establish both a procedure and a standard for making an evaluation as to whether wastes are HLW on a tank-by-tank basis.

The petitioners assert that the proposed amendment is essential to provide protection of the future health and safety of the citizens of the Pacific Northwest.

## II. Classification of DOE Reprocessing Wastes

At Hanford and other sites, questions have arisen regarding the classification of reprocessing wastes for which DOE must provide disposal. In the long-standing view of the Commission, these questions must be resolved by examining the source of the wastes in question. The reason for this is that when Congress assigned to NRC the licensing authority over certain DOE facilities for "high-level radioactive wastes," the Congress was referring to

those materials encompassed within the meaning of the term "high-level radioactive waste" in Appendix F of 10 CFR Part 50. (For a full statement of this position, see the discussion presented in the Commission's advance notice of proposed rulemaking, "Definition of High-Level Radioactive Waste" (52 FR 5993, February 27, 1987).) Accordingly, any facility to be used for the disposal of "those aqueous wastes resulting from the operation of the first cycle solvent extraction system, or equivalent ..." as HLW is defined in Appendix F to Part 50, must be licensed by the NRC. Most of the waste storage tanks at Savannah River (South Carolina), West Valley (New York), and Hanford contain wastes that meet this definition, and the facilities to be used for disposal of these wastes are, therefore, potentially subject to NRC licensing jurisdiction.

However, when the Appendix F definition was promulgated, the Atomic Energy Commission specifically noted that the term HLW did not include "incidental" waste resulting from reprocessing plant operations, such as ion exchange beds, sludges, and contaminated laboratory items, such as clothing, tools, and equipment. Neither were radioactive hulls and other irradiated and contaminated fuel structural hardware encompassed by the Appendix F definition. Under the same reasoning, as the Commission has previously indicated, incidental wastes generated in further treatment of HLW (e.g., salt residues or miscellaneous trash from waste glass processing) would be outside the Appendix F definition.

In the cases of Savannah River and West Valley wastes, DOE plans to retrieve the wastes from their storage tanks and to separate essentially all of the radioactive materials for eventual disposal in a deep-geologic HLW

repository.<sup>1</sup> Accordingly, the projected recovery of HLW from the wastes in tank storage at those sites will be sufficiently complete that the decontaminated salts and other residual wastes are classified as "incidental" (i.e., non-HLW). The NRC will have no regulatory authority, under Section 202 of the Energy Reorganization Act, over DOE's facilities to be used for processing and disposal of the incidental waste.

At Hanford, DOE plans to process the wastes presently stored in double-shell tanks in a manner similar to that planned for the wastes at Savannah River and West Valley. Such processing would separate most of the radioactive constituents of the wastes for eventual deep-geologic repository disposal and, the residual salts would be disposed of onsite in a shallow, near-surface concrete-like grout facility. (Plans for processing of single-shell tank wastes have been deferred.) However, classification of the Hanford double-shell tank wastes has proven more difficult than classification of Savannah River and West Valley wastes. At Hanford, many of the primary reprocessing wastes were generated using older separation technologies, which resulted in substantial dilution of those wastes with nonradioactive materials. In addition, many of the tanks at Hanford contain mixtures of wastes from both reprocessing sources and other sources. Finally, recordkeeping at Hanford was not always thorough enough to allow precise determinations of the origins of the wastes now present in specific tanks at

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<sup>1</sup>See 52 FR 5992, February 27, 1987 (definition of "high-level waste"), n. 1, where the Commission characterizes as "incidental waste," the decontaminated salt with residual activities on the order of 1,500 nCi/g Cs-137, 30 nCi/g Sr-90, 2nCi/g Pu, as described in the Department of Energy's FEIS on long-term management of defense HLW at the Savannah River Plant, DOE/EIS-0023, 1979. Although an EIS has not yet been published for the West Valley Demonstration Project, preliminary estimates indicate the likelihood of an equivalent degree of separation.

Hanford. For these reasons, some of the Hanford tank wastes cannot be readily classified as either HLW or incidental wastes using only the definitions and concepts discussed above.

Taking into account these uncertainties and their implications with respect to NRC jurisdiction, the NRC and DOE staff held several meetings to explore the situation in detail. A principal objective of these meetings was to ascertain, to the extent practicable, whether some or all of the wastes should be regarded as HLW and whether, on the other hand, some or all of the wastes should be classified as non-HLW. Several things became clear as a result of these meetings.

First, management records were adequate for DOE to determine that two double-shell waste tanks do not contain wastes from reprocessing of reactor fuels. Therefore, these wastes clearly do not contain HLW within the Appendix F definition. The NRC agreed with DOE that any disposal facility intended exclusively for these wastes would not be subject to NRC licensing authority.

Second, DOE has carried out a "material balance" analysis of waste management activities at Hanford. This analysis estimated the total amount of "first cycle reprocessing wastes" generated at Hanford and, to the extent practical, the current location of those wastes. The DOE proposed onsite grout disposal of the residual waste from the double-shell tank waste processing would be only a small fraction of the reprocessing wastes originally generated at the site.

Finally, DOE studied possible technologies for additional waste processing, and agreed to remove the largest practical amount of radioactive material from double-shell tank wastes prior to disposal in onsite grout

facilities. This commitment by DOE, coupled with the material-balance study indicating that most of the originally-generated radioactive material would be recovered, led the NRC staff to conclude that the residual waste material should be classified as incidental waste, since they are wastes incidental to the process of recovering HLW. With this classification, DOE could proceed with onsite disposal of such incidental wastes in a grout facility without licensing by the NRC. It should be noted that if the DOE processing operations go as planned, the residual activity of these incidental wastes would be below the concentration limits for Class C wastes under the waste classification criteria of 10 CFR Part 61.

Following its review, the NRC staff, by letter dated September 25, 1989, from R. M. Bernero, Director, Office of Nuclear Material Safety and Safeguards, NRC, to A. J. Rizzo, Assistant Manager for Operations, Richland Operations Office, DOE, endorsed DOE's plans to sample and analyze the grout feeds before disposal in an effort to control the final composition of the grout feed. However, the staff indicated that if DOE were to find, in the course of conducting the sampling program, that the inventories of key radionuclides entering the grout facility are significantly higher than previously estimated, DOE should notify the NRC and other affected parties in a timely manner.

It should be noted that the appropriate classification of some Hanford wastes remains to be determined -- specifically, any single-shell tank wastes, and any empty but still contaminated waste tanks DOE might dispose of in-place. For both types of wastes, a case-by-case determination of the appropriate waste classification might be necessary.

### III. Discussion

The petition for rulemaking presents two basic issues. The question is not whether "high-level waste" should be interpreted by reference to the source-based concepts derived from Appendix F to 10 CFR Part 50. The petitioners agree that this is proper. Nor is there any fundamental challenge to the concept that "incidental wastes" are excluded from the definition of "high-level waste." The issues are much narrower ones. The first issue is a substantive one -- the criteria to be applied in differentiating incidental waste from high-level waste. The second issue is a procedural one -- the process that should be employed by the Commission in arriving at a judgment whether or not it has jurisdiction over particular facilities. These will be addressed in turn.

#### A. The Standard for Classification

We first address the standard that should be employed in distinguishing high-level waste from incidental waste. In doing so, we strive to apply the policies that underlie the adoption of Appendix F to 10 CFR Part 50 (and, hence, Section 202 of the Energy Reorganization Act).

The petitioners suggest that the proper standard, to be applied on a tank-by-tank basis, is to consider all processing streams to be high-level waste unless they have been treated, prior to disposal, "to remove the largest technically achievable amount of radioactivity." Adoption of such a criterion would certainly serve the goal, which had been contemplated by the Commission, of removing the hazardous process streams to a geologic repository for

permanent storage. It is not the only standard, however, that would suffice for this purpose, particularly when it is viewed in a broader regulatory context.

The clearest expression of the overall regulatory objectives is the Atomic Energy Commission's (AEC's) explanatory statement when it promulgated Appendix F -- namely, "that the public interest requires that a high degree of decontamination capability be included in such facilities and that any residual radioactive contamination after decommissioning be sufficiently low as not to represent a hazard to the public health and safety." 35 FR 17530, November 14, 1970. As we read the AEC's intent, the reference to "a high degree of decontamination capability" leaves a substantial degree of discretion. It certainly does not rule out consideration of economic factors as well as technical ones. It was the AEC's contemporaneous practice to consider financial impacts as, for example, in controlling releases of radioactive materials from licensed facilities to the lowest levels "technically and economically practical." AEC Manual Chapter 0511. When the AEC spoke of a "high degree" of decontamination capability, we believe that it was guided by similar considerations. Moreover, from a policy standpoint, this makes good sense, for so long as there is adequate protection of public health and safety, it would not be prudent to expend potentially vast sums without a commensurate expectation of benefit to health and the environment.

Achieving a "high degree of decontamination capability" implies, then, that the facility should separate for disposal as much of the radioactivity as possible, using processes that are technically and economically practical. In addition, however, as the AEC's statement indicates, the residual radioactive

contamination should be sufficiently low as not to endanger public health and safety.

These principles -- high decontamination capability and protection of health and safety -- are the essential benchmarks that have influenced the development of NRC's position vis-a-vis DOE on the question of the proper classification of the tank wastes and grout at Hanford.

When the question regarding classification of wastes was first raised, the NRC staff identified to DOE some approaches that might be used in distinguishing HLW from incidental waste. One approach was expressed as follows:<sup>2</sup>

As an alternative approach, we suggest that DOE attempt an overall material balance for HLW at the Hanford site, using the source-based meaning of HLW. It is hoped that this approach might provide a more efficient means of identifying those wastes subject to licensing by NRC under terms of the 1974 Energy Reorganization Act. Under this approach, if DOE could demonstrate that the largest practical amount of the total site activity attributable to "first-cycle solvent extraction" wastes has been segregated for disposal as HLW, then NRC would view the residual as a non-HLW. We would anticipate that at least 90 percent of the activity would have been separated in this way. Thus, if it can be shown that DOE has processed the waste with the intent to dispose of the HLW in a repository or other appropriate licensed facility, leaving

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<sup>2</sup>Letter from Michael J. Bell, Chief, Regulatory Branch, Division of Low-Level Waste Management and Decommissioning, Office of Nuclear Material Safety and Safeguards, NRC, to Ronald E. Gerton, Director, Waste Management Division, Richland Operations Office, DOE, November 29, 1988. The letter included some "suggested criteria" involving a "good faith" effort to achieve isolation of HLW from nonradioactive salts, such an effort to be judged, as a practical matter, by considering (among other things) alternative separation processes.

behind only a small fraction of only moderately radioactive material, then the goals stated in 10 CFR Part 50 Appendix F and incorporated in the Energy Reorganization Act would have been satisfied; and the disposal of the residual would accordingly not be subject to NRC licensing.

In response, DOE considered the practicality of various waste processing alternatives and presented the results of its study by letter dated March 6, 1989.<sup>3</sup> The results were also presented at a meeting among interested parties, including the petitioners, held on August 4, 1989. (Minutes of the meeting are available for public inspection in the NRC Public Document Room) DOE's "baseline" disposal plans would have recovered all but about 12-13 million curies of cesium-137, together with lesser activities of strontium-90, transuranics, and other radionuclides.<sup>4</sup> DOE's study indicated the practicality of removing an additional 6 million curies of cesium-137 for repository disposal. DOE proposed to remove this additional 6 million curies of cesium-137. DOE also identified additional treatment alternatives, with their associated costs, which it viewed as not being economically practical. DOE's material balance showed that, after the residue from the double-shell tank wastes is grouted, 2 to 3 percent of the key radionuclides which originally entered all Hanford tanks would be disposed of as LLW in near-surface vaults. The concentrations of radionuclides in the grout would be

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<sup>3</sup>Letter from A. J. Rizzo, Assistant Manager for Operations, Richland Operations Office, DOE, to Robert M. Bernero, Director, Office of Nuclear Materials Safety and Safeguards, NRC, March 6, 1989.

<sup>4</sup>DOE noted in the March 6, 1989 letter from Rizzo to Bernero that, based on limited available analytical data, the total cesium-137 could be as much as 20 million curies versus the 12-13 million estimate.

comparable to Class C for cesium and transuranic wastes, and to Class A or B for the remainder.<sup>5</sup> DOE also noted certain engineering and institutional factors that might compensate, especially as to potential intrusion hazards, for the possibility that the total amount of waste that would be grouted would be greater than the amount of Class C waste that might be contained in a typical commercial burial ground.

Based on its review of DOE's March 6, 1989 submission, the NRC staff concluded that DOE's proposed processing would remove the largest practical amount of total site activity, attributable to HLW, for disposal in a deep geologic repository. This finding was based on (1) past and planned treatment of the tank wastes; (2) radionuclide concentration and material balance; and (3) cost-effectiveness of additional radionuclide removal. These conclusions reflected DOE's undertakings both to achieve a high degree of separation and to provide protection of public health and safety. As a result, the staff concluded that the expected residual waste would not be high-level waste and would thus not be subject to NRC licensing authority. The staff thereupon advised DOE that NRC agreed that the criteria used by DOE for classification of the grout feed are appropriate and that the grout facility for the disposal

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<sup>5</sup>NRC understood this statement to connote that cesium-137 and transuranic radionuclides in the residual waste would be less than the concentration limits for Class C low-level waste, as defined in NRC's requirements in 10 CFR Part 61, and that the concentration of other radionuclides would be less than the concentration limits for Class A or B low-level waste.

of the double-shell tank waste would not be subject to NRC licensing authority.<sup>6</sup>

At a meeting in Richland, Washington on July 16, 1992, DOE staff presented more detailed double-shell tank waste processing options and, based on recent analyses, summarized available information on the characteristics of waste within the tanks. DOE's current estimate of the total amount of radioactivity proposed for disposal in grout in near-surface vaults is within earlier range estimates but is now believed to be nearer the upper end of the range. DOE also clarified its intention to apply criteria comparable to the Performance Objectives set out in 10 CFR Part 61. Among other things, these performance objectives include numerical radiation exposure limits for protection of the general population from releases of radioactivity and requires a design to achieve long-term stability of the disposal site.

DOE intends to complete a reassessment of the tank waste processing options by March 1993. This reassessment, the NRC staff understands, will include a reexamination of the practicality of achieving higher degrees of separation, particularly with respect to those tanks that contain substantial quantities of key radionuclides.

Assuming implementation of DOE's plans as described above, the Commission concludes that any radioactive material from the double shell tanks that is deposited in the grout facility would not be high-level radioactive

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<sup>6</sup>Letter from Robert M. Bernero, Director, Office of Nuclear Material Safety and Safeguards, NRC, to A. J. Rizzo, Assistant Manager for Operations, Richland Operations Office, DOE, September 25, 1989. The letter also called upon DOE to advise NRC periodically of the analytical results of samples of key radionuclides entering the grout facility, so that the classification of the waste might be reconsidered if the inventories were significantly higher than DOE had estimated.

waste subject to NRC's licensing jurisdiction. The responsibility for safely managing those wastes rests with the Department of Energy. The basis for the Commission's conclusion is that the reprocessing wastes disposed of in the grout facility would be "incidental" wastes because of DOE's assurances that they: (1) have been processed (or will be further processed) to remove key radionuclides to the maximum extent that is technically and economically practical; (2) will be incorporated in a solid physical form at a concentration that does not exceed the applicable concentration limits for Class C low-level waste as set out in 10 CFR Part 61; and (3) are to be managed, pursuant to the Atomic Energy Act, so that safety requirements comparable to the performance objectives set out in 10 CFR Part 61 are satisfied.

The petitioners also requested that the Commission exercise oversight to assure that the grout meets temperature requirements for low-level waste forms. They acknowledge that DOE's vault design is protective of human health and the environment if heat produced by residual radioactivity, together with heat generated from reactions during the grout process, is kept within defined limits. They present no technical data to suggest that achievement of these temperature controls presents any unusual engineering challenge. In any event, inasmuch as the Commission does not consider the grout produced in accordance with DOE's plans to be high-level waste, it does not have the authority to carry out this oversight function.

## B. Procedural Issues

### 1. Whether Rulemaking Is Necessary and Desirable

The petitioners urge that the Commission initiate rulemaking procedures that would result in the establishment of substantive criteria for determining whether particular radioactive wastes either are or are not high-level waste. Generally, a decision whether to proceed by rulemaking (as requested) or to make determinations in individual, ad hoc litigation lies within the informed discretion of the cognizant administrative agency. Rulemaking is most appropriate where an agency seeks to establish a general principle, having prospective effect, to be applied in a wide variety of factual contexts. Where the issue before an agency involves the application of law to a very specific existing fact situation, especially where that situation is not representative of other matters that may need to be decided by the agency, then it is clearly more efficient and more to the point to decide by a process of adjudication (i.e., on a case-by-case basis).

Applying these principles to the petition at hand, the Commission has little difficulty in concluding that rulemaking is neither necessary nor desirable. Reprocessing wastes are located at only four principal locations in the United States. The Commission has previously determined that the residual contamination anticipated from proposed operations at Savannah River should be characterized as incidental waste and not high-level waste (see 52 FR 5993, Feb. 27, 1987, cited above, at footnote 1.) Wastes generated at the Idaho Chemical Processing Plant are markedly different from those at Hanford and Savannah. Therefore, if questions about classification of the

Idaho wastes should arise, precedents established at Savannah River and Hanford might be difficult to apply. Any wastes at the Western New York Nuclear Service Center will require treatment in accordance with the applicable provisions of the West Valley Demonstration Project Act.

The limited practical effect of the decision -- i.e., restricted to the Hanford tanks -- is reason enough to proceed by way of adjudication instead of rulemaking. The Commission is persuaded further by the need to avoid making premature decisions with respect to the wastes stored at Hanford in single-shell tanks that are not the subject of pending treatment plans. If the Commission were to establish rules to apply to the wastes remaining in those tanks, our inquiry would have to be greatly broadened; and it might become necessary to consider a wide range of situations that might or might not ever come to pass in the future.

## 2. Whether the Commission Is Adequately Informed

Petitioners suggest that their proposed procedures, which include detailed tank-by-tank assessments, are necessary to ensure confidence in the treatment process employed by DOE and to build confidence that the treatment standard is being met.

The issue to be decided by the Commission is a much narrower one: it is merely to determine whether the activities being undertaken by the Department of Energy fall within the NRC's statutory jurisdiction. As in the case of other persons whose activities may fall within our regulatory sphere, the Commission may from time to time demand information so as to be able to determine whether or not to initiate an enforcement action. The NRC staff has

acted in this manner in its inquiries to DOE. It has obtained and evaluated information that is relevant and material to a determination whether or not the proposed activities of the DOE are subject to NRC licensing jurisdiction. All the information obtained and evaluated has been made available contemporaneously to the public.

Moreover, as a practical matter, NRC recognized the uncertainties associated with the projected radionuclide inventories in the tank wastes and endorsed DOE plans for sampling and analyzing the grout feeds before disposal. The objective of these efforts is to control the final composition of the grout wastes. If DOE finds that it can no longer assure that these wastes will be managed in accordance with the criteria previously discussed, DOE should notify NRC.

If a standard of "largest technically achievable amount .... will be isolated" were to be applied, then the facts submitted by DOE might not be sufficient to conclude that NRC lacked jurisdiction. However, the proper standard includes considerations of economical practicality as well. As indicated in an earlier part of this decision, the Commission has obtained information that is sufficient for this purpose.

### 3. Future Adjudications

The petitioners contemplate that if a rule were to be adopted in accordance with their proposal, particular determinations of how specific wastes would be characterized would be "left to individual adjudicative proceedings." The NRC infers that the "proceedings" contemplated by petitioners are licensing activities of the kinds specified in Section 189 of

the Atomic Energy Act, as amended, 42 USC 2239. Adjudications in this type of proceeding are in some cases to be conducted in accordance with the hearing provisions of Subpart L of 10 CFR Part 2.

These procedures are often appropriate with respect to activities that are subject to NRC regulatory and licensing authority. However, the NRC is reluctant to employ them in the context that is proposed -- to determine whether NRC has jurisdiction in the first place. To do so would entail the conduct of an adjudicatory proceeding in order to see whether another adjudicatory licensing proceeding must be held. More importantly, the Commission considers that the existing record contains all the factual information needed for a decision and that no unresolved material factual issues remain that would require further proceedings.

#### 4. Other Considerations

While both NRC and DOE have focused their attention upon the meaning of the statutory term "high-level waste" and its application to the materials in storage at Hanford, other considerations might come into play in determining whether or not DOE activities are subject to licensing. In particular, it should be recalled that NRC exercises licensing authority under Section 202(4) only as to "facilities authorized for the express purpose of subsequent long-term storage of [DOE-generated] high-level waste." The content of individual waste tanks is by no means dispositive of the question whether the facilities for storage of the treated waste are subject to licensing. A number of other factors may be relevant and material as well: (1) what are the limits, geographically and functionally, of "facilities"; (2) have those facilities

been "authorized" (and by whom is such authorization required); and (3) have those facilities been authorized "for the express purpose of subsequent long-term storage of high-level waste" where those who may authorize the facility make no express mention of high-level waste? It is not necessary for the Commission to address these questions at length in order to dispose of the pending petition.

#### IV. Public Comments on the Petition

The NRC received letters from 12 commenters. Two letters were from other Federal agencies, two were from public interest groups, one was from a nuclear industry corporation, and seven were from private individuals. Most comments were opposed to the petition.

##### A. Process and Standards Proposed in Petition

Several comments expressed concern that granting the petition would have an adverse effect on the timely disposal of radioactive waste at Hanford. This was a concern because many of the Hanford waste tanks were seen as nearing or exceeding their design life. The provisions of the rulemaking proposed in the petition were viewed as limiting DOE's flexibility in selecting the most effective processes for waste treatment and disposal. The petitioner's request that "best available technology" be used in removing HLW material from the tank wastes was seen as ignoring costs of disposal, exposures to workers, and environmental impacts.

Some comments disputed the petitioner's claim that the rulemaking proposed in the petition would offer a better process for classification and disposal of the Hanford tank wastes. These commenters did not see any advantage in the proposed process over the process for classification and disposal currently in use. One comment suggested that the Commission's rulemaking requiring disposal of Greater-than-Class C waste in a geologic repository or Commission-approved alternative (53 FR 17710, May 19, 1989) might force DOE to allocate resources to handle the hazards, rather than to waste further time fruitlessly searching for ways to remove more and more activity from one part of the waste. The action proposed by the petitioners was viewed as not increasing the safety of disposal of the waste.

The Commission believes that adherence to the standard of technical and economic practicality generally reflects agreement with these comments.

#### B. Creation of a Risk-Based Classification System

Several comments, while noting that the rulemaking proposed by the petition would not do so, favored creation of a risk-based system of radioactive waste classification.

The Commission has previously addressed the costs and benefits of creating a new system of radioactive waste classification. Its rationale for not doing so is outlined in the statement of considerations to the proposed Part 61 rulemaking on disposal of Greater-than Class C waste (53 FR 17709, May 18, 1988). Further consideration of these issues is beyond the scope of this proposed rulemaking action.

### C. NRC Licensing Authority

Some comments focused on the licensing authority of NRC over the Hanford tank wastes. DOE stated that the rulemaking suggested in the petition would involve NRC in regulation of DOE's predisposal waste treatment and processing activities, which would be inconsistent with NRC authority to license specific DOE facilities under the Energy Reorganization Act of 1974. Another commenter stated that the proposed rulemaking was inconsistent with the statutory responsibilities of DOE and NRC. These arguments have already been discussed, and require no further response. It may be emphasized, however, that even if the Commission were found to have jurisdiction over the disposal facilities, it would not regulate either the tanks themselves or the facilities being used to process the wastes in these tanks; and there is reason for concern that implementation of the petitioner's proposal might draw the Commission improperly into regulation of those facilities.

A commenter concluded that DOE was currently in violation of 10 CFR Part 30 requirements for a license because various near-surface waste disposal facilities at Hanford are being used for "long-term storage" of high-level radioactive waste. The issue is not pertinent to the subject matter of the petition. However, in any case, the comment does not take into consideration the judicial interpretation of the term in Natural Resources Defense Council, Inc. v. U.S. Nuclear Regulatory Commission, 606 F.2d 1261 (D.C. Cir., 1979). The D.C. Circuit Court of Appeals ruled in this case in support of NRC's position that the tanks have not been authorized for use as

long-term storage or disposal and are, therefore, not subject to NRC licensing.

#### D. Public Input

A number of comments stressed the importance of adequate public input into decision making regarding disposal of the Hanford tank wastes. Some called for public hearings on this subject to be held in the Pacific Northwest. One commenter noted that the EIS which was done for Hanford provided the opportunity for public comment. Another commenter believed that the Commission's rulemaking procedures did not offer the public a better opportunity for input than does the current licensing procedure.

As indicated in the Discussion above, the NRC's review of the situation with respect to the double-walled tanks has been carried out publicly from the start. Meetings with DOE have been open, and at least one of the petitioners (the State of Washington) has been provided advance notice and an opportunity to attend. Documents have been placed in the Public Document Room and have been made available for public inspection. It appears to the Commission that the essence of the issue concerns the appropriate standard for evaluating whether certain wastes should be regarded as high-level waste or not. Sufficient factual information is available to carry out these evaluations. Also, the petition for rulemaking has afforded an opportunity for views to be expressed with respect to the appropriateness of the standard.

A decision that NRC lacks licensing jurisdiction does not mean that opportunities for public input will be denied. As DOE undertakes its waste

management activities, it will afford opportunities for public participation to the extent required by its own enabling statutes, regulations, and orders.

#### E. Other Comments

One commenter took exception to the petitioner's claim that the radioactive inventory of the Hanford tank wastes was inadequately known. The commenter believed that the contents of the tanks can be bounded well enough to judge the relative safety of various disposal options.

The Commission considers the available information to be sufficiently bounded to enable it to conclude that DOE's proposed operations (with respect to the material stored in the double-shell tanks) can result in the removal from the Hanford double-shell tanks of as much of the radioactive waste as may be technically and economically practical, and that the applicable regulatory objectives have been satisfied. Once these judgments are made, it is not the NRC's role to judge the relative safety of various disposal options, and we decline to do so.

One comment stated that while the petition was aimed solely at the Hanford tank wastes, its provisions could potentially affect all radioactive wastes from reprocessing, including those at Savannah River, West Valley, and the Idaho National Engineering Laboratory. As the waste management programs at these other sites are in different stages of implementation, the impacts of the provisions would vary from site to site. As indicated above, the Commission is sensitive to this consideration yet believes that the specific case at hand only needs to be addressed at this time.

Some comments urged the Commission not to change the present definition of HLW. The Commission is not changing the present definition.

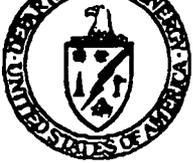
#### V. Conclusion

For the reasons presented in this document, the petition for rulemaking is denied.

Dated at Rockville, Maryland this 26<sup>th</sup> day of February, 1993.

For the Nuclear Regulatory Commission.

  
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Samuel J. Chilk,  
Secretary of the Commission.



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Dr. Shirley A. Jackson, Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

OH-0271-99

Dear Dr. Jackson:

After reviewing SECY-98-251, U. S. Nuclear Regulatory Commission (NRC) Staff Proposal - Decommissioning Criteria for West Valley, DOE believes that NRC's proposed process and decommissioning criteria provide a reasonable framework for moving forward on completion of the West Valley Demonstration Project in a manner which is both protective of public health, safety, and the environment, as well as consistent with NRC's License Termination Rule. DOE, in cooperation with the New York State Energy Research and Development Authority (NYSERDA), has made significant strides in processing the high-level waste (HLW) at the site into a durable solid glass. We are now focused on selecting a preferred alternative for Project completion and long-term site management that incorporates stakeholder input and is protective of worker and public health and safety, and the environment.

The process and decommissioning criteria proposed by NRC in SECY-98-251 are consistent with DOE's responsibilities as set forth in the West Valley Demonstration Project (WVDP) Act of 1980. They are also consistent with the roles, responsibilities, and overall sequence of activities as defined in DOE's Cooperative Agreement with New York State and DOE's Memorandum of Understanding with the NRC.

The proposed criteria support DOE's objectives for the preferred alternative, which include reducing the Project footprint. In analyzing the various alternatives under the proposed D&D criteria, we will pay particular attention to technology readiness and the balance of benefits, risks, and costs associated with implementing each of the alternatives. We will evaluate the doses to workers and to the off-site population that will result from the alternatives, against the potential dose consequences if site institutional controls fail. DOE believes this type of an analysis is critical in selecting a path forward.

DOE acknowledges that there are certain regulatory issues that will need to be further explored, and some potential alternatives for resolution of these issues were identified by the NRC staff in SECY-98-251. For facilities where the license termination rule cannot be feasibly satisfied, DOE supports the use of an on-going NRC license as the basis for providing long-term institutional controls.

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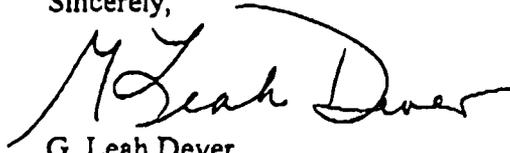
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In addition to endorsing the availability of long-term institutional controls, DOE supports the application of Incidental Waste Criteria. Although we believe that these criteria should be applied consistently among sites that managed HLW, the criteria should also be flexible to allow the characteristics unique to each HLW site or facility to be factored into the Incidental Waste determination. For this reason, DOE believes the performance-based approach provided in 10 CFR 61.58 is the most appropriate method for West Valley to make incidental waste determinations for HLW facility closures.

DOE is committed to developing a preferred alternative that protects worker and public health and safety, and the environment; takes into account the West Valley Citizen Task Force and other stakeholder recommendations; and meets NRC's criteria. DOE will support the continuing involvement and guidance provided by the NRC in moving forward through this process toward WVDP completion.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Leah Dever". The signature is fluid and cursive, with a large initial "G" and "L".

G. Leah Dever,  
Manager

cc:

M. W. Frei, EM-34, 323/TREV  
J. A. Turi, EM-36, 1089/CLOV  
M. E. Rawlings, EM-32, 1188/CLOV  
B. A. Mazurowski, OH/WVDP, WV-37



# **Department of Energy Response To SECY-98-251**

**Barbara Mazurowski, Director  
U.S. Department of Energy  
West Valley Demonstration Project**



## **Overview**

- **WVDP Act**
  - **DOE Responsibilities**
  - **DOE Agreements**
  - **DOE Limitations**
  
- **DOE's Response to SECY-98-251**
  
- **WVDP Completion Process**
  
- **Conclusions**



## West Valley Demonstration Project Act - 1980

### DOE Responsibilities (Section 2)

- Develop containers
- Solidify liquid high-level wastes (HLW)
- Transport to Federal repository
- Dispose of low-level and transuranic wastes
- Decontaminate and decommission (D&D) facilities used... "in accordance with such requirements as the Commission *may* prescribe"



# West Valley Demonstration Project Act - 1980

## DOE Agreements (Section 2)

- New York State
- Nuclear Regulatory Commission

## DOE Limitations (Section 5)

***"This Act does not authorize the Federal government to acquire title to any high-level radioactive waste at the Center or to the Center or any portion thereof."***

***"This Act shall not apply or be extended to any facility or property at the Center which is not used in conducting the Project."***

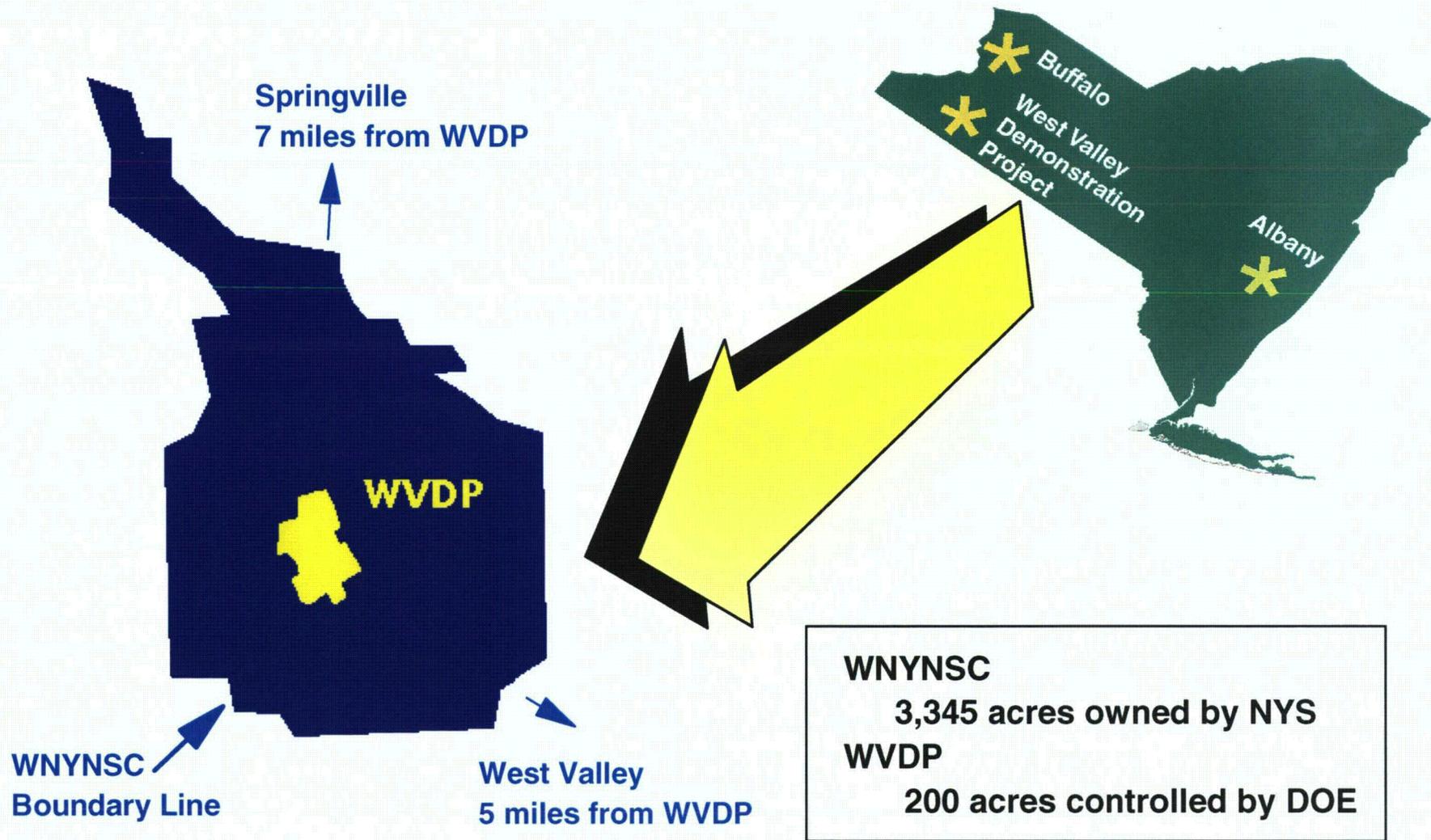


## **Cooperative Agreement with New York - 1981**

- **Defines DOE and NYSERDA roles and responsibilities**
- **Defines Project facilities and Retained Premises**
  - **Excludes the pre-Project wastes in the NRC-Licensed Disposal Area**
  - **State-Licensed Disposal Area is retained by NYSERDA, as is the balance of WNYNSC**
- **Defines activities necessary for Project completion**
  - **D&D of Project facilities in accordance with such requirements as the Commission *may* prescribe**
  - **Provide technical assistance for any licensing action that is required for NYSERDA to assume possession of the Project premises and Project facilities**

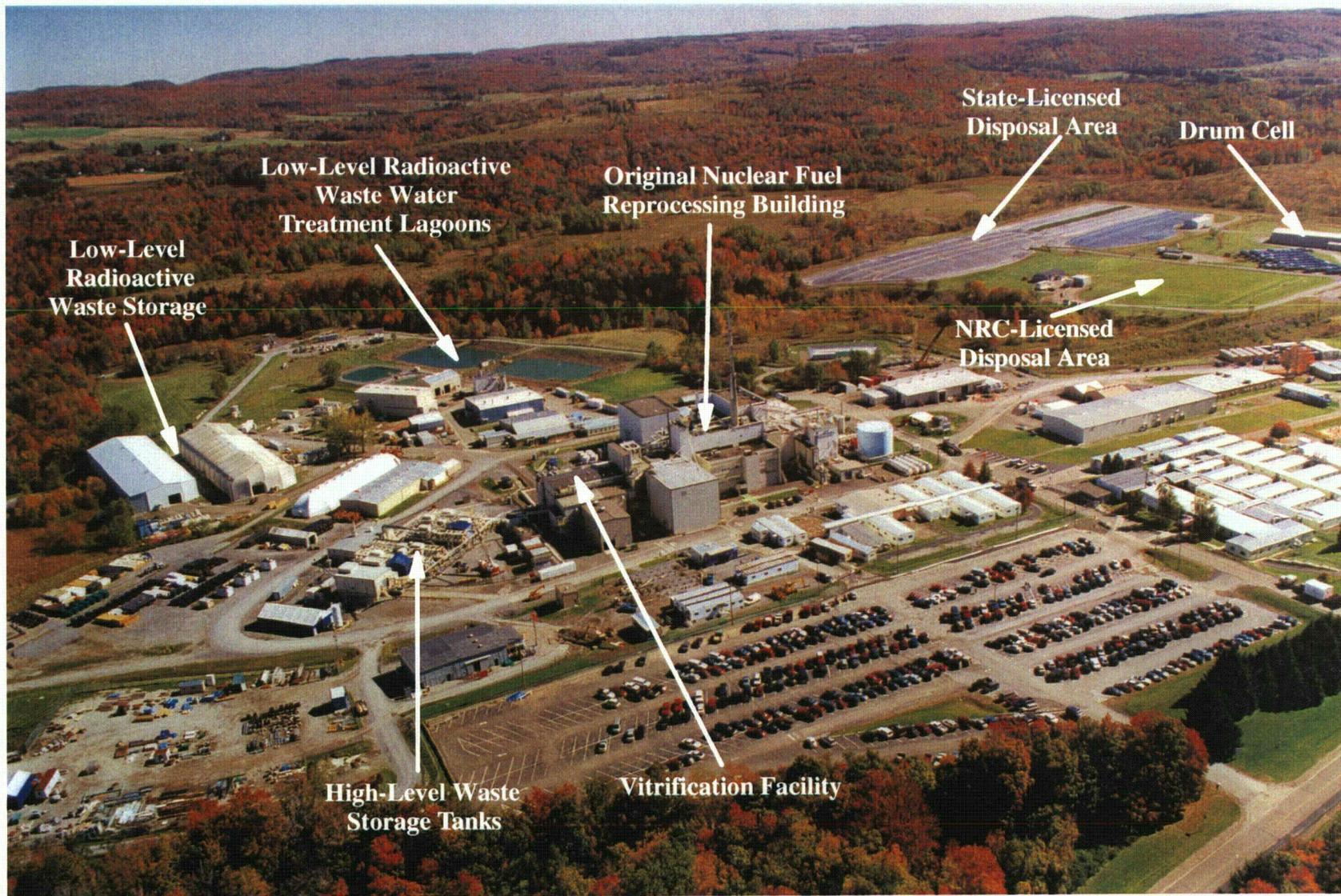


## WVDP Location





# West Valley Facilities





## **Memorandum of Understanding with the NRC - 1981**

- **Establishes arrangements for review and consultation by the NRC**
  
- **Defines the process for Project D&D**
  1. **DOE will perform an analysis of impacts and risks of potential disposition modes for the tanks and other facilities used at the Center.**
  2. **Upon receipt of DOE's analysis, the NRC will prescribe D&D requirements.**
  3. **DOE will prepare a Project Decommissioning Plan, including a description of engineering and operating activities to be performed, that will be reviewed and commented upon by the NRC.**
  4. **DOE will prepare a Site Status Report, which will include a statement of the NRC's D&D requirements and the extent to which they have been met for those portions of the Center to be decontaminated and decommissioned under the Act.**



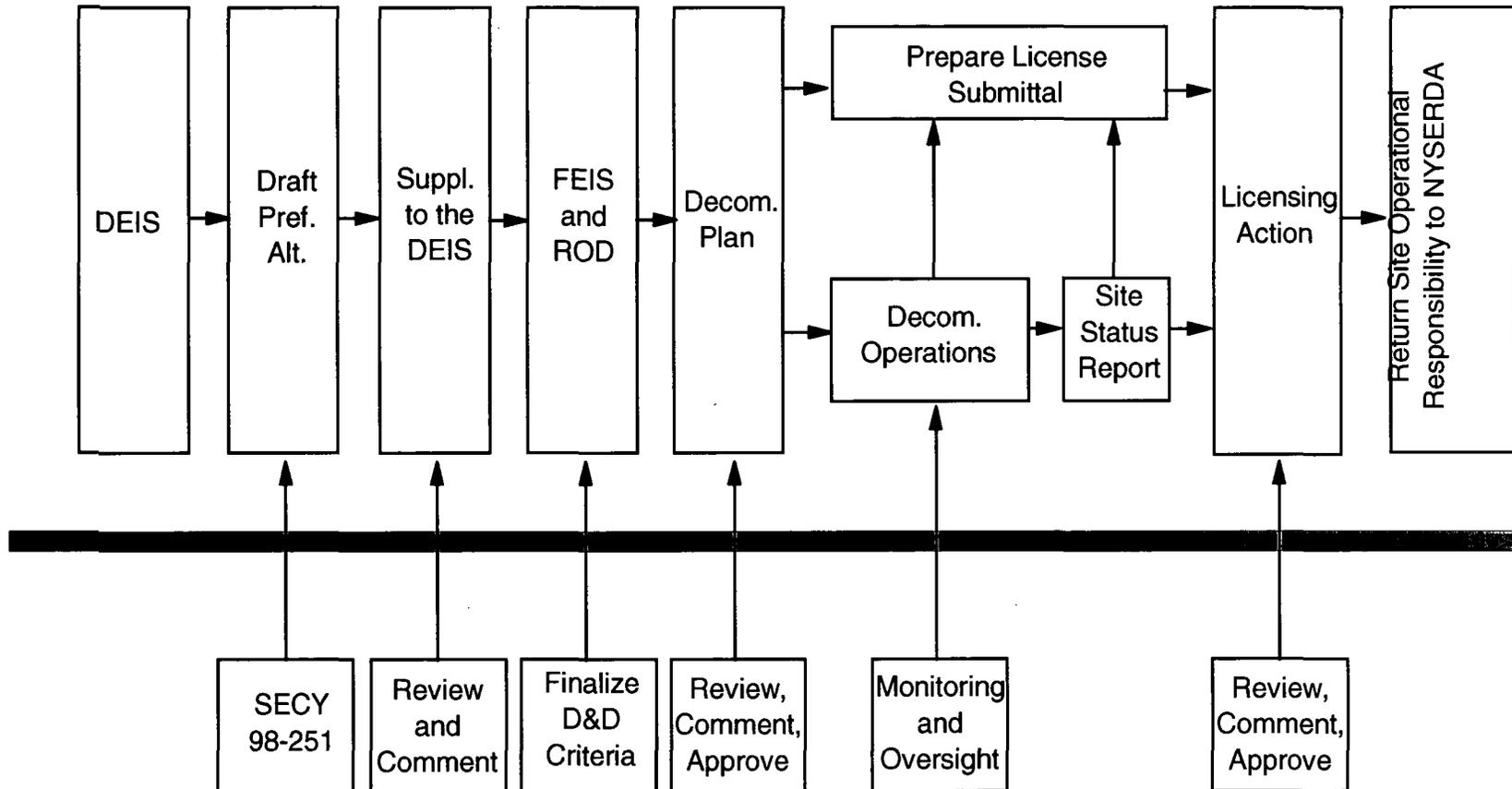
## **DOE'S Response to SECY-98-251**

- **SECY-98-251 is consistent with the D&D process identified in the DOE/NRC Memorandum of Understanding.**
- **SECY-98-251 allows DOE to meet its obligations under the WVDP Act in a manner that is protective of public health and safety.**
- **DOE supports application of the License Termination Rule, and endorses the use of an ongoing license as the means for providing long-term institutional controls.**
- **DOE supports the use of Incidental Waste Criteria for high-level waste facilities, and requests that 10 CFR 61.58 be utilized to make incidental waste determinations for facility closures.**



# WVDP Completion Process

## DEPARTMENT OF ENERGY



## NUCLEAR REGULATORY COMMISSION



## **Conclusions**

- **DOE supports the process and D&D criteria proposed in SECY-98-251; it provides a good framework for moving forward on Project completion.**
- **Timing is appropriate, providing DOE and NYSERDA with intended D&D criteria to support current decision-making.**
- **10 CFR 61.58 should be used to classify residual wastes under the Incidental Waste Criteria.**
- **DOE intends to take into account the recommendations of the Citizen Task Force and other stakeholders.**

Presentation to the  
U.S. Nuclear Regulatory Commission

Comments on SECY 98-251

January 12, 1999

Paul L. Piciulo, Ph.D.

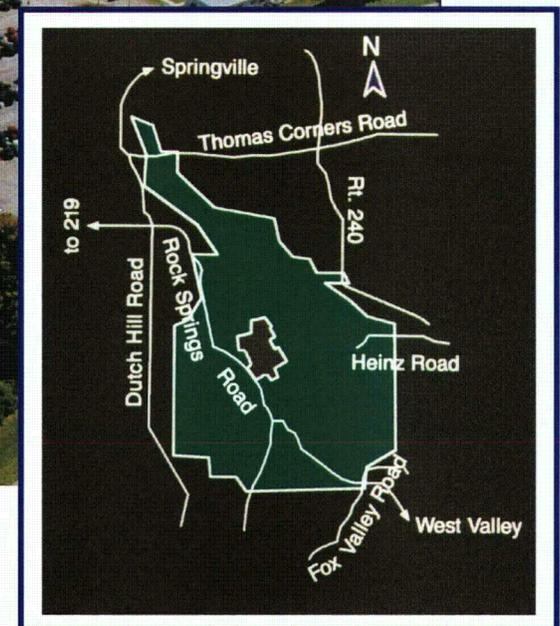
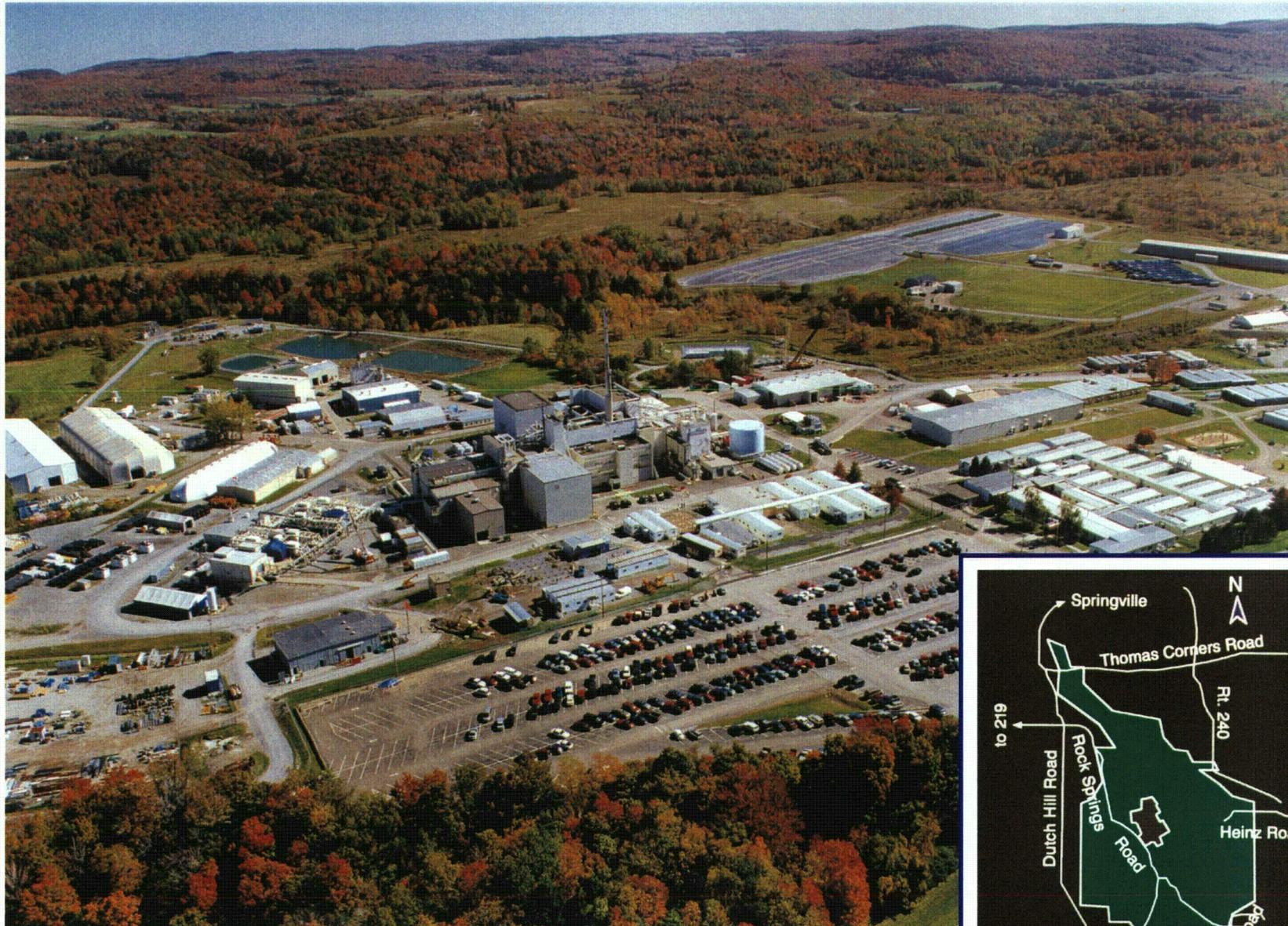
Program Director

West Valley Site Management Program

New York State Energy Research and Development Authority



# Western New York Nuclear Service Center



# Federal Government Involvement at West Valley

- ◆ Promoted commercialization of the nuclear fuel cycle
- ◆ Licensed the only commercial nuclear fuel reprocessing facility in the nation
- ◆ Provided base load (75%) of nuclear fuel for reprocessing
- ◆ Approved disposal of fuel hulls, ruptured spent fuel, and reprocessing wastes on site
- ◆ Disposed of significant quantities of waste from government facilities in the commercial disposal area at West Valley



# U.S. Department of Energy's Statutory Responsibilities at West Valley

- ◆ West Valley Demonstration Project Act
- ◆ Cooperative Agreement between United States Department of Energy and New York State Energy Research and Development Authority on the Western New York Nuclear Service Center at West Valley, New York



# Comments on Decommissioning Criteria for West Valley

- ◆ Single set of decommissioning criteria
- ◆ Application of License Termination Rule
- ◆ Application of Incidental Waste Criteria



# Single Set of Decommissioning Criteria

- ◆ Criteria for DOE under the WVDP Act must be the same as for NYSERDA under the NRC license
- ◆ Criteria for the site must consider impacts from the State-Licensed Disposal Area (SDA)
- ◆ Regulatory responsibilities of U.S. NRC and the New York State Department of Environmental Conservation must be coordinated



# Application of the License Termination Rule

- ◆ Protective of public health and safety and the environment
- ◆ Provision for establishment of alternate criteria should be clarified
- ◆ Long-term licensing should remain a regulatory alternative to decommissioning
- ◆ Disposal facilities may require a license for an extended period
- ◆ Criteria for decommissioned facilities must be coordinated with criteria that may be established for facilities remaining under license



# Application of the Incidental Waste Criteria

- ◆ Incidental waste criteria have only been applied to activities at DOE owned facilities
- ◆ Long-term safety of the in-place closure of the HLW tanks is based on engineering designs and performance assessments projected over thousands of years
- ◆ NRC should condition any application of incidental waste criteria at West Valley on DOE monitoring and maintenance of the closed HLW tanks
- ◆ Class C low-level waste concentration limits in 10 CFR §61.55 should apply





**New York State Energy Research and Development Authority**

*William R. Howell, Chairman*

*F. William Valentino, President*

West Valley Site Management, 10282 Rock Springs Road, P.O. Box 191, West Valley, NY 14171-0191

(716) 942-4387 • Fax: (716) 942-2148 • <http://www.nyserda.org/>

January 4, 1999

The Honorable Dr. Shirley Jackson  
Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Dear Chairman Jackson:

The New York State Energy Research and Development Authority (NYSERDA) thanks the Nuclear Regulatory Commission (Commission) for acknowledging our request to allow NYSERDA and other interested parties to provide input on the staff paper on Decommissioning Criteria for West Valley (SECY-98-251) prior to your decision. In general, NYSERDA believes that the paper sets forth a workable path forward to setting final decommissioning criteria for the West Valley Demonstration Project (WVDP) and the licensed facilities at West Valley. However, NYSERDA has significant concerns regarding a few aspects of the paper. Our concerns are presented below.

### **Single Set of Criteria**

As the Commission is aware, NYSERDA has long sought to insure that any criteria set for West Valley will cover all facilities at the Center and address equally the responsibilities of the Department of Energy (DOE) under the WVDP Act and those of NYSERDA under its Part 50 license. (See *e.g.*, Paul Piciulo's August 14, 1996 letter to Carl Paperiello and Mr. Paperiello's September 20, 1996 response [copies attached].)

The facilities and premises that DOE is required to decontaminate and decommission under the WVDP Act constitute most of the facilities and premises covered under NYSERDA's license. NYSERDA strongly believes that whatever criteria are set for any such facilities should be precisely the same for DOE (under the Act) and NYSERDA (under the license). We believe that footnote 1 on page 2 of the staff paper is intended to address this concern and appreciate staff's effort to deal with this important issue. We assume that the adjudication or rulemaking proposed on page 3 of the paper to set the final criteria will make it clear that the same criteria apply to both activities.

We have some concerns also with the treatment of the State-licensed Disposal Area (SDA) in the paper. While we understand that the Commission cannot set criteria for this State-licensed facility, we believe that the criteria set for the site must include all facilities at the site. As staff points out on page 3 of the paper, the impacts from the SDA are considered in the site-wide environmental

Honorable Dr. Shirley Jackson

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impact statement (EIS). NYSERDA believes that the Commission's exercise of its regulatory responsibilities must similarly be coordinated with the New York State Department of Environmental Conservation's (DEC) exercise of its regulatory responsibilities so that the criteria ultimately work together to deal with the entire site. We urge the Commission to work more closely with DEC to accomplish this goal.

### **Application of the License Termination Rule**

NYSERDA agrees in principle with staff's proposal to apply the criteria contained in NRC's License Termination Rule to the facilities at West Valley. We believe that the criteria contained in that rule, which were developed after an extensive participatory process, are well designed to protect public health and safety and the environment.<sup>1</sup> However, at a meeting of our Citizen Task Force on November 17, certain language in the staff paper dealing with "alternative criteria" became a focus of concern. The language appears on page 5 of the staff paper, in the first full paragraph. There, it states that:

If DOE/NYSERDA depart from any of the proposed criteria described in this paper to complete the EIS, the EIS will need to show some justification such as that adherence to the proposed criteria would cause more human or environmental harm than good or be prohibitively expensive/technically infeasible, and that any alternative criteria chosen demonstrate a sufficient level of protection of human health and safety and the environment, reflect a reasonable balance of costs and benefits, and represent a viable approach.<sup>2</sup>

Members of the Citizen Task Force were extremely concerned about the implications of this language and expressed consternation in the belief that standards less protective than those contained in the License Termination Rule might be applied to facilities at West Valley. NYSERDA sympathizes with the concerns expressed by Citizen Task Force members at that meeting. We note, however, that the License Termination Rule itself contains a provision allowing for the prescription of alternate criteria under certain circumstances (10 CFR § 20.1404). NYSERDA believes that it

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<sup>1</sup> It is our position that DOE must meet criteria for unrestricted release for all WVDP facilities and premises in order to leave the site. If DOE believes it is appropriate to meet criteria for restricted release for some facilities or premises, NYSERDA maintains that DOE must make the required showing, remain at the site, and provide the required institutional controls. If maintaining institutional controls is required in order to decommission WVDP facilities and premises, then maintaining those controls is part of DOE's obligation to decommission those facilities and premises under the WVDP Act.

<sup>2</sup> See also page 3 of the staff paper: "If the DOE/NYSERDA preferred alternative does not conform to the proposed decommissioning criteria, or if DOE/NYSERDA propose alternative criteria, then the staff will recommend an approach for approval by the Commission."

Honorable Dr. Shirley Jackson

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January 4, 1999

might be helpful if the Commission provided some further guidance concerning the circumstances and procedure under which alternate criteria might be provided for facilities at West Valley.<sup>3</sup>

The staff paper appropriately raises some real concerns about the feasibility of exhuming and shipping off site large quantities of radioactive waste. Analyses have suggested that the expense and impacts of such activities for some of the site facilities (particularly the disposal areas) may not be justified by human health or environmental benefits. NYSERDA appreciates NRC's recognition of this reality. Regulatory alternatives for continued control, such as those outlined in the staff paper, must be considered seriously for at least some of the site facilities. Such continued control of licensed facilities is contemplated in and consistent with NRC's License Termination Rule. (See 62 Fed. Reg. 39067.) Clearly, one possibility that may arise from decisionmaking under the EIS is that some facilities may have to remain under license for an extended period. However, any adjudication or rulemaking approving such treatment with respect to any facilities at West Valley should make it clear that those facilities have not been decommissioned.

#### **Application of the Incidental Waste Criteria to Closure of the HLW Tanks**

The staff paper proposes that the incidental waste criteria described in the March 2, 1993 letter from R. Bernero to J. Lytle be applied as decommissioning criteria at West Valley for any on-site disposal of liquid supernate waste removed from the HLW tanks and solidified or any material remaining in the HLW tanks after closure. One of the alternatives that DOE is evaluating for completion of the WVDP would include closing the HLW tanks in place. While NYSERDA has no objection to the incidental waste criteria in principle, we have serious concerns with the potential application of those criteria at West Valley, especially to the closure of the HLW tanks.

It is important to note that incidental waste criteria have only been applied to the activities of DOE — at Savannah River, Hanford, and now at West Valley. In this regard, West Valley is unique. While DOE is the owner of the Savannah River and Hanford sites and plans to be present at those sites indefinitely to provide any needed site control, the same is not the case at West Valley. NYSERDA owns the West Valley site on behalf of New York State and DOE has indicated that it plans to complete its activities at West Valley as soon as possible, perhaps by 2006. (See *Accelerating Cleanup: Paths to Closure Site Narrative*, DOE Ohio Field Office, June, 1998.)

As described in the staff paper, the incidental waste criteria require, among other things, that the waste be managed so that safety requirements comparable to the performance objectives set out in 10 CFR Part 61 are satisfied. In the Draft Environmental Impact Statement for Completion of the West Valley Demonstration Project and Closure or Long-Term Management of Facilities at the Western New York Nuclear Service Center (DEIS), Alternative III evaluated closing the HLW tanks

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<sup>3</sup> Reference to and incorporation of the guidance provided in Section 4.4 of Draft Reg Guide DG-4006 might be sufficient for this purpose.

Honorable Dr. Shirley Jackson

Page 4

January 4, 1999

in place by back-filling them with cement. The performance assessment of this alternative showed that an off-site individual on Cattaraugus Creek would receive a dose from the HLW tanks of 71.9 millirem for the peak year assuming institutional control is maintained. If institutional control were lost, an intruder would receive a dose of 89,000,000 millirem, assuming an agriculture/residential scenario. To address this obviously unsatisfactory performance, DOE has re-engineered the closure of the HLW tanks by designing multiple engineered barriers. These new engineered barriers have resulted in a drastic reduction in the projected doses. New performance assessments performed by DOE's EIS contractor indicate that the dose to the off-site individual on Cattaraugus Creek would be 0.0017 millirem which represents a reduction by a factor of 40,000. The intruder dose is projected to be 40 millirem, representing a reduction by a factor of 2,225,000. NYSERDA urges NRC to take a hard look at the engineering designs and the performance assessments for this facility to see whether NRC concurs with the reasonableness of the results.

Moreover, the drastic reduction in the projected doses between the DEIS and the new performance assessment shows that, even if the projections are reasonable, DOE is relying on engineered barriers to achieve compliance with performance objectives over a period of thousands of years. The Nuclear Waste Policy Act of 1982 makes it clear that if the tank waste were to remain HLW, the federal government would be responsible for providing for the permanent disposal of that waste in a federal repository. NYSERDA believes strongly that if the reclassification of the tank waste from HLW to non-HLW is to be based on a multi-thousand year performance assessment conducted by DOE of engineered barriers installed by DOE, then DOE should be the guarantor of the performance of those engineered barriers, not NYSERDA. For this reason, if NRC believes that DOE's performance assessment is reasonable, NRC should condition any application of the incidental waste criteria at West Valley on DOE's remaining at the site and providing any necessary monitoring and maintenance of the closed HLW tanks. This would be consistent with the application of the incidental waste criteria at Savannah River and Hanford where DOE will have a continuing presence.

A separate requirement of the incidental waste criteria as described in the staff paper is that the waste "be incorporated in a solid physical form at a concentration that does not exceed the applicable concentration limits for Class C low-level waste as set out in 10 CFR Part 61." NYSERDA understands that DOE plans to meet this requirement not by meeting the requirements for Class C waste in the tables in 10 CFR §61.55, but by seeking approval from the Commission under 10 CFR §61.58. (See the DOE issue paper entitled *HLW Storage Area/Vitrification Facility, Issues and Options for Resolution*, July, 1997 [copy attached].) This latter section allows the Commission to "authorize other provisions for the classification and characteristics of waste on a specific basis, if, after evaluation of the specific characteristics of the waste, disposal site, and method of disposal, it finds reasonable assurance of compliance with the performance objectives in Subpart C of this part." NYSERDA does not believe that resort to §61.58 is appropriate to meet the incidental waste criteria. The concentration limits for Class C low-level waste set out in 10 CFR Part 61 are those contained in §61.55. The provisions of §61.58 essentially authorize the Commission to allow a variance under certain circumstances if the concentration limits can not be met. Moreover, DOE is proposing to meet two separate requirements of the incidental waste criteria (meeting

Honorable Dr. Shirley Jackson

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January 4, 1999

performance objectives and not exceeding Class C concentration limits) by making only one showing — namely that the performance objectives will be met. This would effectively eliminate one requirement of the incidental waste criteria by folding it into another. If this had been the Commission's intention, the concentration limit requirement would have been unnecessary.<sup>4</sup>

NYSERDA requests that the Commission direct NRC staff to assure that the above concerns are sufficiently addressed before any decisions regarding decommissioning criteria for West Valley are made final.

NYSERDA looks forward to presenting these concerns to and discussing the proposed criteria with the Commission at the January 12, 1999 meeting.

Sincerely,

WEST VALLEY SITE MANAGEMENT PROGRAM

*Paul L. Piciulo for*

Paul L. Piciulo, Ph.D.

Program Director

PLP/ams

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<sup>4</sup> Even if the Commission allows DOE to meet the incidental waste criteria requirement by satisfying §61.58 rather than §61.55, the Commission should be aware that if the waste exceeds the concentrations in the tables in §61.55, disposal of the waste is a federal responsibility under §3(b)(1) of the Low Level Radioactive Waste Policy Amendments Act of 1985.



F. WILLIAM VALENTINO  
President

(716) 942-4387 Fax: (716) 942-2148  
West Valley Office, P.O. Box 191 · West Valley, New York 14171-0191

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August 14, 1996

Mr. Carl J. Paperiello, Director  
Office of Nuclear Material Safety and Safeguards  
Nuclear Regulatory Commission  
Washington, D.C. 20655

Dear Mr. Paperiello:

SUBJECT: Decontamination and Decommissioning Criteria for the Western New York Nuclear Service Center (Center) and NRC Staff Cooperation with the Citizen Task Force (CTF) for the Site

The New York State Energy Research and Development Authority (NYSERDA) is writing to request NRC's guidance with regard to processes that could be followed to set a single set of decontamination and decommissioning criteria for the West Valley Demonstration Project (WVDP) and the Part 50 licensed facilities at the Center. NYSERDA is also requesting NRC's staff support for a CTF that is being formed to discuss issues associated with the completion of the WVDP and closure or long-term management of the facilities at the Center.

NYSERDA holds title to the Center on behalf of the state of New York. The Center was formerly the site of a commercial spent nuclear fuel reprocessing facility; and is now the site of the WVDP, a joint federal and state cleanup effort operated by the United States Department of Energy (DOE). NYSERDA is also the licensee under an NRC Part 50 license for the facilities at the Center (License No. CSP-1), which is currently being held in abeyance during the term of the WVDP.

DOE and NYSERDA recently released a *Draft Environmental Impact Statement for Completion of the WVDP and Closure or Long-Term Management of the Facilities at the Center (DEIS)*. NRC is participating in the DEIS process as a cooperating agency for the purpose of setting decontamination and decommissioning criteria for the WVDP. We understand that DOE staff are preparing a letter to NRC that will propose a plan for setting WVDP decontamination and decommissioning criteria. In previous discussions with NRC staff, NYSERDA has made the point that it is essential, both from a technical and from a legal standpoint, that a single, coordinated set of criteria be developed that will cover the entire Center. NYSERDA understands the complexities of attempting to develop a single set of criteria for a site that is not only governed by both the WVDP Act and a Part 50 license, but which also includes a State-licensed, Low-Level, Radioactive Waste Disposal Area regulated by the New York State Department of Environmental Conservation (NYSDEC), under NRC's Agreement States Program. However, NYSERDA firmly believes that if these efforts are not fully integrated, any criteria that are fashioned for the Center will fail to address legitimate technical concerns, and will ultimately succumb to legal challenges. NYSERDA requests NRC's guidance on establishing a procedure that will meet all regulatory requirements and allow NRC to set criteria for the Part 50 license simultaneously with the criteria for the WVDP. NYSERDA would like to meet with appropriate NRC representatives, together with representatives of DOE and NYSDEC, as soon as possible to formulate a coordinated process.

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Mr. Carl Paperiello  
Page 2  
August 14, 1996

As NYSERDA staff have previously informed NRC staff, NYSERDA will be establishing a CTF, with DOE's cooperation, to provide recommendations to the agencies on issues that could impact the completion of the WVDP and closure or long-term management of the facilities at the Center. We believe that NRC's willingness to provide staff support to answer questions that CTF members may have about technical concerns, regulatory issues, or other matters, within NRC's regulatory authority and expertise, will be extremely important to its success as the CTF is likely to have many questions about the regulatory requirements and procedures that would be necessary to implement any of the closure or management alternatives analyzed in the DEIS. We trust that NRC staff will participate in this effort to provide an opportunity for greater meaningful public participation in the deliberations concerning the future of West Valley.

NYSERDA and DOE hope to have the CTF up and running some time during the month of October. It would be extremely helpful if we could meet with appropriate NRC representatives as soon as possible so that we could attempt to formulate a process to arrive at a coordinated set of decontamination and decommissioning criteria for the site in time to present this process to the CTF early on in its deliberations.

I would appreciate it if an appropriate representative from NRC staff would contact me regarding NRC staff cooperation with the CTF and potential dates for a meeting to discuss the process of developing a coordinated set of criteria for the Center and the WVDP.

Thank you for your consideration and your prompt attention to this matter.

Sincerely,

WEST VALLEY SITE MANAGEMENT PROGRAM

*TL Picciolo for*  
Paul L. Picciolo, Ph.D.  
Program Director

PLP/amw

cc: T. J. Rowland (DOE)  
H. J. Miller (NRC)  
G. C. Comfort (NRC)  
P. J. Merges (NYSDEC)



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 20, 1996

*26, 10/1/96  
Liz Lowe/*



Dr. Paul L. Piciulo, Program Director  
West Valley Site Management Program  
New York State Energy Research  
and Development Authority  
P.O. Box 191  
West Valley, New York 14171-0191

SUBJECT: DECONTAMINATION AND DECOMMISSIONING CRITERIA FOR THE WESTERN NEW YORK NUCLEAR SERVICE CENTER

Dear Dr. Piciulo:

I am responding to your letter to me dated August 14, 1996. In your letter, you request the U.S. Nuclear Regulatory Commission's guidance with regard to processes that could be followed to set a single set of decontamination and decommissioning (D&D) criteria for the West Valley Demonstration Project (WVDP) and the Part 50 licensed facilities at the Western New York Nuclear Service Center (Center). Your letter also requests NRC staff participation in a Citizen Task Force (CTF) that will discuss issues associated with completion of the WVDP and closure or long-term management of the facilities at the Center.

NRC is aware of the New York State Energy Research and Development Authority's (NYSERDA's) concerns that a single set of D&D criteria be established for both WVDP and the Center. NRC's normal practice is to require remediation of the site to established unrestricted release levels; however, in certain instances, the licensee may elect to present alternative criteria to NRC, usually in the form of a decommissioning plan. The licensee's presentation should clearly state the alternative criteria requested and include a detailed performance assessment of the potential impacts to the health and safety of the public and environment during both remediation and long-term care scenarios. The NRC staff will review this submittal and issue an environmental impact statement (EIS), in accordance with 10 CFR Part 51 and with proper public participation, before setting final D&D criteria and proposed decommissioning actions for the site in question.

Because of the unique situation established by Public Law 96-368 (WVDP Act), the U.S. Department of Energy (DOE) is required to decontaminate and decommission certain aspects covered by the Center's Part 50 license "in accordance with such requirements as the Commission may prescribe." The addition of this third party may require that alternative methods be considered to set D&D criteria. Because of the timing of your and DOE's joint draft EIS discussing closure alternatives for the WVDP and Center, we agree with your suggestion that NRC staff meet with appropriate NYSERDA and DOE representatives to formulate a coordinated process for establishing alternative D&D criteria. Please contact Mr. Gary Comfort (301-415-8106) of my staff to organize this meeting.

Dr. Paul L. Piciulo

-2-

As part of the effort to establish alternative criteria for the Center and the MVDP, NRC is willing to participate with the CTF. However, the availability of NRC staff participation will depend upon the schedules determined for CTF meetings. Again, please contact Mr. Comfort to make appropriate arrangements.

Sincerely,



Carl J. Paperiello, Director  
Office of Nuclear Material Safety  
and Safeguards

cc: Mr. Thomas J. Rowland, Director  
West Valley Demonstration Project  
U.S. Department of Energy  
P.O. Box 191  
West Valley, New York 14171

## WASTE MANAGEMENT AREA 3 - HLW STORAGE AREA & VITRIFICATION FACILITY

### HLW Storage Area/Vitrification Facility Issues and Options for Resolution

#### ALTERNATIVE I

##### 3.1.1 DEIS Alternative Description

Under DEIS Alternative I, the HLW storage tanks and associated structures and systems would be deconned as necessary, disassembled, packaged, and removed from site for disposal. Those portions of the tanks and systems directly associated with HLW storage would be deconned and exhumed remotely, while structures and systems not directly in contact with waste and with little or no contamination would be removed conventionally and, if uncontaminated, sent directly offsite for disposal in a construction landfill. Sludge removed from the tanks as a result of decon activities would be considered HLW and "solidified and containerized for offsite disposal." This waste management area also includes the vitrification facility, whose system, components, and structure would be deconned as necessary, disassembled, packaged, and removed from site for disposal.

##### 3.1.2 Issues with HLW Storage Area/Vitrification Facility Alternative I Description

There are two primary issues associated with Alternative I implementation for the HLW storage area/vitrification facility, involving the DEIS waste classification assumptions and resolution of the definition of transuranic waste. These are described in a combined discussion below.

1. Classification and disposition of residual waste -- Following the completion of vitrification, there will likely be some residual high activity waste remaining in the HLW storage tanks and key vitrification process vessels. In an Alternative I scenario, this waste would be addressed during tank exhumation and vitrification cell decontamination activities. The DEIS classifies this waste as HLW and states that it would be "solidified and containerized for off-site disposal." However, how this solidification would be accomplished is not addressed. It is certain, however, that the current vitrification melter would not be available to process these wastes, although vitrification is the only acceptable treatment at this time for wastes classified as high level.

As this description illustrates, the regulatory discussions in the DEIS do not recognize the existence of a process for cleaning up HLW facilities to the point where the residual waste can be classified as incidental (non-HLW). Consequently, the analysis of the residual waste streams in the DEIS, while made conservatively in strict accordance with codified requirements, is not accurate in terms of potential alternatives for residual waste classification and disposition.

Although the WVDP intends to remove residual high activity waste to the extent that is technically and economically feasible, there is the likelihood that most of the residual waste would contain transuranic elements in concentrations in excess of 10 nCi/g, which, based on the definitions in the WVDP Act and requirements in the Stipulation of Compromise, would require a determination by the NRC as to whether this waste would be considered transuranic waste or low-level waste (LLW).

## WASTE MANAGEMENT AREA 3 – HLW STORAGE AREA & VITRIFICATION FACILITY

### 3.1.3 Possible Responses to Issues

Possible responses to the issues discussed above are outlined below.

1. Classification and disposition of residual waste – Guidance on the extent of waste removal necessary to support classification of residual wastes as incidental is provided in the NRC's denial of the petition for rulemaking submitted by the States of Washington and Oregon (58 FR 12342, March 4, 1993). In denying the petition, NRC concluded that the process and criteria for classifying radioactive waste materials as HLW or non-HLW are well established and can be applied on a case-by-case basis without revision to the regulations. As discussed in 58 FR 12342, the following three criteria need to be applied on a case-by-case basis in order to consider waste as incidental:

- Compliance with 10 CFR Part 61 Performance Objectives - The wastes are managed, pursuant to the Atomic Energy Act, so that safety requirements comparable to the performance objectives set out in 10 CFR Part 61 are satisfied.
- Waste Classification - The wastes will be incorporated in a solid physical form at a concentration that does not exceed the applicable limits for Class C low-level waste as set out in 10 CFR Part 61.
- Assessment of Technical and Economic Feasibility - The wastes have been processed to remove key radionuclides to the maximum extent that is technically and economically practical.

In order to satisfy the requirements of the WVDP Act (solidify the HLW), DOE intends to remove and process HLW to the extent necessary to meet the aforementioned incidental waste criteria. Although the specifics of the Hanford HLW separations case differ from the West Valley HLW retrieval case, the basic intent is the same in both instances; process the HLW so that the majority of the radioactivity and the primary hazard is retained for vitrification. The following sections discuss how the aforementioned three conditions can be applied to determine the level of waste removal necessary to consider the HLW tanks and Vitrification Facility residuals as incidental waste.

#### A. Compliance with 10 CFR Part 61 Performance Objectives

The intent of this condition is to provide reasonable assurance that the performance objectives delineated in Subpart C of 10 CFR 61 can be met. Subpart C contains the following four performance objectives:

- §61.41 - Protection of the general population from releases of radioactivity
- §61.42 - Protection of individuals from inadvertent intrusion
- §61.43 - Protection of individuals during operations
- §61.44 - Stability of the disposal site after closure

These performance objectives were established to ensure that waste disposal under Part 61 would be conducted in a safe manner. All four performance objectives were relevant and applicable to Hanford in 58 FR 12342 because the underlying objective was bulk waste disposal. However, the purpose of applying these criteria at West Valley is to outline a process that can be used to define the extent of waste removal necessary from HLW management facilities so that the residual wastes

### WASTE MANAGEMENT AREA 3 – HLW STORAGE AREA & VITRIFICATION FACILITY

can be considered incidental LLW. Consistent with this broader objective, a greater degree of attention will be paid to those performance objective aspects that define the appropriate level of waste removal rather than those aspects that focus on ancillary issues like disposal site suitability, which will likely be addressed as part of preferred alternative selection. Accordingly, it was determined that Parts 61.41 and 61.42 are more relevant than Parts 61.43 and 61.44. The basis for this conclusion is summarized below.

a. 10 CFR 61.41 - Protection of the general population from releases of radioactivity

Section 61.41 requires that concentrations of radioactive material which may be released to the general environment not result in an annual dose exceeding an equivalent of 25 millirems to the whole body. In addition, §61.41 requires that efforts be made to maintain releases of radioactivity in effluents to the general environment as low as reasonably achievable (ALARA). If this option were chosen as a preferred alternative, a performance assessment for the potential disposal site using the predicted West Valley final waste form would need to be conducted to ensure that this performance objective can be satisfied.

b. CFR 61.42 - Protection of individuals from inadvertent intrusion

Section 61.42 requires that the design, operation, and closure of a land disposal facility provide adequate protection to the inadvertent intruder after the period of active institutional controls. Consistent with §61.59, the period of active institutional controls is normally limited to 100 years. Section 61.42 does not contain any quantitative criteria on the degree of protection required for the inadvertent intruder after the period of institutional controls. Firm criteria on allowable exposure limits and the types of intruder scenarios that should be evaluated are contained in NRC guidance documents. NUREG-0782 and NUREG-0945 are the DEIS and FEIS for the Part 61 Rulemaking and contain the guidance for evaluating compliance with §61.42. The analysis supporting the Part 61 Rulemaking limited exposures to the inadvertent intruder to 500 mR/yr based on the evaluation of agricultural, home construction, and well drilling scenarios.

As discussed under Section 61.41 above, a disposal site performance assessment using West Valley's HLW tank and Vitrification Facility waste would be required to demonstrate compliance with this performance objective.

c. 10 CFR 61.43 - Protection of individuals during operations

Section 61.43 requires that the occupational doses to workers during closure operations and the period of institutional controls be kept ALARA. The radiation protection standards for demonstrating compliance with this performance objective are delineated in 10 CFR 20.

Given the operational nature of this ALARA performance objective and the engineering safeguards and administrative procedures that would be put in place to ensure compliance with §61.43, it is logical to assume that compliance with this performance objective can be demonstrated. In other words, meeting the dose objectives of Parts 61.41 and 61.42 will dictate what is an acceptable residual inventory in terms of meeting performance objectives. If Alternative I is part of the Record of Decision, then it will be appropriate for design and operations planning to go beyond the conceptual level and a more detailed assessment will be

## WASTE MANAGEMENT AREA 3 – HLW STORAGE AREA & VITRIFICATION FACILITY

conducted to define the exact approach for ensuring compliance with this performance objective. Typically, an analysis with this level of detail is performed as part of the Decommissioning Plan.

### d. 10 CFR 61.44 - Stability of the disposal site after closure

Section 61.44 requires that the disposal facility be sited, designed, and closed in a manner to achieve long-term stability and to the extent practical eliminate the need for ongoing maintenance. Most of the regulations that were promulgated to address this performance objective are contained in Subpart D (Technical Requirements for Land Disposal Facilities).

From a performance assessment standpoint, Part 61.44 requires that the site be modeled so that no ongoing maintenance or corrective actions are relied upon after the period of institutional controls. This modeling would be incorporated into the Performance Assessment for the potential waste disposal site, as discussed above.

### B. Waste Classification

Part 61 provides two distinct methods for waste classification, the generic concentration-based limits listed in §61.55 and the alternative provisions approach delineated in §61.58. The outputs from both approaches can be used to determine the acceptability of wastes for near-surface disposal (Class C). In the case of Alternative I where waste would be disposed offsite at an operating waste disposal facility, it is concluded that it is more appropriate to submit an analysis under §61.55.

#### Waste Classification According to §61.55

Section 61.55 is based on the pathways analysis performed to support the Part 61 Rulemaking. The Part 61 analysis documented in NUREG-0782 and NUREG-0945 evaluated the disposal of commercial nuclear waste streams at a generic site. The pathways analysis conducted in support of the Part 61 Rulemaking identified the maximum concentrations of radionuclides that met the performance objectives in §61.41 and §61.42. The regulatory outputs of this pathways analysis are listed in Table 1 and Table 2 of §61.55. Table 1 lists the maximum allowable concentrations of significant long-lived radionuclides and Table 2 lists the maximum allowable concentrations of significant short-lived radionuclides. When considering wastes that are composed of both long-lived and short-lived radionuclides, the sum of the fractions method outlined in §61.55 should be used.

### C. Assessment of Technical and Economic Feasibility

The preceding discussions identified the regulatory requirements associated with meeting the Part 61 Performance Objectives and Class C waste classification limits. These regulatory requirements can be viewed as a set of minimum expectations for waste removal. That is, if it is technically and economically feasible to remove more waste than is required to meet the performance objectives and Class C waste classification limits, then further waste retrieval should be pursued to the point of diminishing returns.

## WASTE MANAGEMENT AREA 3 - HLW STORAGE AREA & VITRIFICATION FACILITY

In the case of the HLW tanks, a graded approach to waste retrieval is planned for the period immediately following the primary vitrification campaign. The purpose of this additional effort is to remove HLW residuals from the tanks while the vitrification melter is still operational to the extent technically and economically feasible. The graded approach involves the use of increasingly aggressive waste removal techniques to remove waste to the point where increasingly diminished returns make continued efforts at waste removal no longer a viable option. The techniques currently being considered include, in relative order of application, modifications to the existing waste transfer and mobilization pumps, introduction of new transfer equipment, mechanical decon using a remote utility arm, and chemical flushing.

Assuming the disposal site performance assessment results indicate that the HLW tank and vitrification facility waste can be safely disposed at that site, the TRU waste definition for this West Valley waste will also have been demonstrated, for that portion of the waste that may exceed the 10 nCi/g transuranic limit. NRC concurrence with these performance assessment results and TRU conclusion will be requested to close the 10 vs. 100 nCi/g issue prior to waste disposal.

## WASTE MANAGEMENT AREA 3 – HLW STORAGE AREA & VITRIFICATION FACILITY

### ALTERNATIVE II

#### 3.2.1 DEIS Alternative Description

Under Alternative II, the HLW storage tanks and associated structures and systems would be deconned as necessary, disassembled, packaged, and placed into the newly constructed Retrievable Storage Area. Those portions of the tanks and systems directly associated with HLW storage would be deconned and exhumed remotely, while structures and systems not directly in contact with waste and with little or no contamination would be removed conventionally and, if uncontaminated, sent directly offsite for disposal in a construction landfill. Sludge removed from the tanks as a result of decon activities would be solidified and stored on site. The vitrification facility system, components, and structure would also be deconned as necessary, disassembled, packaged, and placed into the Retrievable Storage Area. Although not analyzed in the DEIS, the WVDP plans to apply the incidental waste guidance to waste removal under this Alternative to the same degree as planned under Alternative I.

The post-implementation duration of this alternative is indefinite. In other words, no plans have been developed to remove the waste from its storage location, although the mode of storage is retrievable.

#### 3.2.1 Issues with HLW Storage Area/Vitrification Facility Alternative II Description

There is one issue associated with the HLW storage area and vitrification facility under DEIS Alternative II as currently written. This is summarized as follows:

1. Long-term storage vs. *de facto* disposal - Alternative II in the DEIS indicates that wastes will be stored in retrievable form at the WVDP for an indefinite period of time. All analyses of impacts, both long- and short-term, presume that waste remains in storage indefinitely. By not specifying a discrete storage period and/or discussing possible "disposal" options following storage, the appearance is given that this alternative really represents *de facto* disposal simply from failure to take any further action once the waste is in storage. One issue raised by NYSDEC is whether this facility would actually need to be designed and licensed in accordance with requirements for a disposal facility.

#### 3.2.3 Possible Responses to Issues

For the issue discussed above, there are three potential responses identified to resolve the issue. These responses are discussed in greater detail below.

1. Long-term storage vs. *de facto* disposal -- Because Alternative II of the DEIS does not specify an end to the waste storage activity, several commentors indicated that this alternative really represents disposal. Since the incidental waste concept for the tanks and Vitrification Facility would also be employed for Alternative II, the wastes designated for storage in this facility would be low level. Therefore, there is no additional concern in this instance with long-term storage (or *de facto* disposal) of HLW.
  - a. Alternative II can be enhanced to reflect a discrete storage duration. At the end of the specified storage period (for example, 100 years), the options for waste disposition could be revisited. It may be that technology will have advanced during that period such that new treatment and/or disposal options would be available that make final waste disposition a more attractive option at that time. Also, the wastes will produce somewhat reduced occupational doses to workers in some cases, where short-lived isotopes such as Cesium have been able to decay during the storage

### WASTE MANAGEMENT AREA 3 – HLW STORAGE AREA & VITRIFICATION FACILITY

period. Some contaminated soil may be able to be free released at that time. There are several scenarios that could be developed for this revised alternative that would more accurately portray it as a temporary "storage" alternative, rather than a default disposal alternative.

- b. If the decision is made to leave the storage duration open ended, then the implications of this alternative being a *de facto* onsite disposal alternative should be recognized. Although the storage facilities are designed so that the wastes will be monitorable and retrievable, the long-term nature of this alternative makes it difficult to support the claim of storage being a temporary solution. One option would be to pursue the "assured storage" concept, whereby it is acknowledged that indefinite storage may be the most viable solution to waste management at this point in time. While this is a relatively new waste management concept and little regulatory precedent has been established, some general requirements would be that the facility be designed with the rigor of a disposal facility while maintaining retrieval capabilities.
- c. If this alternative were selected for implementation, either as a whole or in part, this may create a situation in which a perpetual NRC license would be required. This is an acceptable option for sites that cannot satisfy any level of release criteria under the NRC's final rule for license termination. In the case of the West Valley site, a new NRC license would actually have to be issued or the former license reinstated. The specifics of this action have not yet been defined, since the final condition of the site will dictate the type and terms and conditions of the license. The specific requirements for this facility would be determined in collaboration with the appropriate regulatory agencies during preparation and review of the decommissioning plan and the application for a license.

## WASTE MANAGEMENT AREA 3 – HLW STORAGE AREA & VITRIFICATION FACILITY

### ALTERNATIVES IIIA AND IIIB

#### 3.3.1 DEIS Alternative Description

Under both Alternatives IIIA and IIIB, the HLW tanks would not be decontaminated, and the sludge inside the tanks would remain in place. Confinement barriers would be constructed, and the tanks and the interior of the tank vaults would be backfilled with low-density concrete applied simultaneously from several access holes in the tanks and vaults to achieve uniform layers. The gravel layers and containment pans beneath the tanks would be backfilled along their perimeters.

Under Alternative IIIA, the vitrification facility would not be decontaminated. The steel and siding that forms the operating area around the vitrification cell would be removed. The stack would be removed and disposed of in the vitrification facility. Access and confinement barriers would be constructed, and the vitrification cell (including the melter, in-cell off-gas system, and the water transfer area) would be backfilled with low-density concrete. The resulting monolith would look like the existing building, but the inside would be filled with concrete. Security systems would be installed, and routine surveillance would be performed for long-term maintenance and monitoring.

Under Alternative IIIB, the vitrification facility would be dismantled in two phases. The first phase involved the dismantlement of the outer and ancillary portions of the facility, which would be deconned, with uncontaminated rubble temporarily stored on site. The second phase would be performed remotely within the confinement structure planned for this portion of dismantlement of the Process Building. The melter would be left in place, although other systems and equipment would be dismantled and placed at or below grade, as needed, for encapsulation in concrete as closure is completed.

#### 3.3.2 Issues with HLW Storage Area/Vitrification Facility Alternative III Description

There are a number of issues associated with the HLW storage area and vitrification facility under DEIS Alternative III. The issues involve assumptions about the quantity and classification of residual waste remaining at closure, as well as the adequacy of the proposed conceptual closure designs. These are discussed in greater detail below.

1. Quantity and classification of residual waste – As discussed previously, the regulatory sections in the DEIS did not recognize the existence of a process for cleaning up HLW facilities to the point where the residual waste can be classified as incidental. The DEIS assumed that the HLW Tanks contained a 3% heel and the melter contained about 500 kg of radioactive glass at the conclusion of vitrification operations. The viability of these residual waste inventories needs to be evaluated against incidental waste criteria.
2. Generic closure design weaknesses – The conceptual closure designs analyzed in the DEIS are generic in nature – they were not designed with any facility or waste-specific enhancements that would improve their performance above that of a “standard” generic design. For example, the design for the HLW storage area does not employ an engineered cover above the tanks, nor do the HLW storage area or vitrification facility designs employ any special grout formulations designed to minimize migration of radionuclides. As a result, the DEIS performance assessment indicates that the performance objectives in 10 CFR 61.41 and 10 CFR 61.42 will not be met.

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### 3.3.3 Possible Responses to Issues

Discussed below is an integrated approach for addressing the issues identified above.

1. Satisfying NRC incidental waste guidance -- As discussed in Section 3.1.3, there are three criteria that need to be met in order to classify residual waste as incidental.
  - Compliance with 10 CFR Part 61 Performance Objectives - The wastes are managed, pursuant to the Atomic Energy Act, so that safety requirements comparable to the performance objectives set out in 10 CFR Part 61 are satisfied.
    - §61.41 - Protection of the general population from releases of radioactivity
    - §61.42 - Protection of individuals from inadvertent intrusion
    - §61.43 - Protection of individuals during operations
    - §61.44 - Stability of the disposal site after closure
  - Waste Classification - The wastes will be incorporated in a solid physical form at a concentration that does not exceed the applicable limits for Class C low-level waste as set out in 10 CFR Part 61.
    - §61.55 - Waste classification, or
    - §61.58 - Alternative requirements for waste classification and characteristics
  - Assessment of Technical and Economic Feasibility - The wastes have been processed to remove key radionuclides to the maximum extent that is technically and economically practical.

Addressing these three criteria will provide an integrated approach for protecting public health and safety as well as ensuring that the degree of waste removal is commensurate with the proposed conceptual closure design.

#### A. Compliance with 10 CFR Part 61 Performance Objectives

The revised performance assessment for the HLW Tanks will be based on an improved closure design that employs a defense-in-depth concept. The design will use multiple barriers as well as specially formulated stabilization materials in order to minimize doses. By conducting the performance assessment in this manner, it will be possible to estimate the minimum extent of waste removal necessary to meet 10 CFR 61.41 and 10 CFR 61.42. It is expected that the requirements for protection of the inadvertent intruder (10 CFR 61.42) will be limiting.

The tank closure design evaluated in the DEIS was a generic design that did not include facility specific design features such as an engineered cap or grout formulated to chemically immobilize radionuclides. Both of these facility specific design characteristics are existing technologies that substantially reduce the probability of contaminant migration and the likelihood of access by an intruder.

The DEIS performance assessment indicated that this basic tank closure design was not adequately protective of human health and the environment. In contrast, a preliminary assessment has

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indicated that the new enhanced design, in concert with waste removal, is expected to provide performance assessment results that clearly satisfy Part 61 performance objectives and the new NRC rule for license termination. A complete performance assessment for this facility using the new closure design is currently being prepared. The relative contribution of this facility to a North Plateau intruder will be determined when a preferred alternative is identified and the North Plateau source terms can then be combined and assessed for the North Plateau intruder scenario. This assessment will also be carried forward for the site as a whole when assessing the dose to the Buttermilk Creek resident and the various offsite receptors.

Site stability characteristics are an integral part of the performance assessment model. Assuming that the performance assessment results satisfy §61.41 and §61.42, then the site stability performance objective will also be satisfied (§61.44). Finally, the fourth performance objective – protection of individuals during operations (§61.43) – will be addressed as part of the decommissioning plan.

### B. Waste Classification

In accordance with the second requirement of the incidental waste guidance, the residual waste remaining following completion of waste removal activities must satisfy the requirements for Class C LLW, at a minimum. However, estimating the waste class formed by closing a former HLW storage tank in-place is complicated and subject to several interpretations. The different methods that could be used to calculate the waste class are primarily a function of the degree of mixing achieved during the closure process and any assumptions that are made regarding the mass or volume over which the residual activity is distributed. Guidance on the acceptability of the different assumptions that can be used for residual waste classification are available in the NRC Final Branch Technical Position (BTP) on Concentration Averaging and Waste Encapsulation<sup>1</sup>.

The BTP provides guidance on acceptable waste classification and encapsulation practices for a variety of waste types. Eight generic waste cases are discussed in the BTP and guidance is provided for each on the allowable limits for concentration averaging and waste encapsulation. Since the guidance can not address all unique waste types or waste packaging methods, an "Alternative Provisions" section is included that defines the bases and procedures through which other concentration averaging or encapsulation positions may be judged acceptable. As discussed in the BTP, the method for pursuing the Alternative Provisions approach would be to invoke 10 CFR 61.58. The applicability of this approach for classifying the residual waste in the HLW tanks is discussed in the following section.

#### Waste Classification According to §61.58

The alternative waste classification provisions delineated in §61.58 were promulgated because the waste disposal conditions analyzed in support of the Part 61 Rulemaking did not adequately encompass the range of conditions that may be encountered during implementation under Part 61. The Part 61 rulemaking analysis evaluated the disposal of commercial nuclear waste streams at a generic site. Due to the unique nature of fuel reprocessing waste streams and the atypical WNYNSC site conditions, the NRC has

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<sup>1</sup>Nuclear Regulatory Commission, "Final Branch Technical Position on Concentration Averaging and Encapsulation," January, 1995.

## WASTE MANAGEMENT AREA 3 -- HLW STORAGE AREA & VITRIFICATION FACILITY

indicated that it may be appropriate to submit an analysis under §61.58. In a June 8, 1992 letter,<sup>2</sup> the NRC stated that as an alternative to waste classification under §61.55, the site specific, performance-based approach allowed in §61.58 could be used to determine the nature and inventory of WVDP wastes suitable for near surface disposal.

Section 61.58 allows for alternative waste classification approaches as long as an analysis is conducted that provides reasonable assurance that the Part 61 performance objectives will be met. Previous NRC guidance<sup>3</sup> has indicated that any performance assessment conducted to address WVDP waste classification issues must be cumulative and include all disposed wastes. Accordingly, the performance assessment that is being conducted to address §61.41 and §61.42 will be cumulative and include the interaction of multiple source terms.

### C. Assessment of Technical and Economic Feasibility

As required by NRC incidental waste guidance, waste will be removed from the HLW Tanks and the Vitrification Facility to the extent that is technically and economically practical. This may result in residual waste inventories that are less than 3% heel in the tanks or 500 kg of glass in the melter. At a minimum, the extent of waste removal will be sufficient to meet Part 61 Performance Objectives. However, the requirement to achieve waste removal to the extent technically and economically feasible could likely result in waste removal in excess of that required to meet the Part 61 objectives.

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<sup>2</sup>R.M. Bernero (NRC), Letter to M.D. Olsen (DOE), June 8, 1992.

<sup>3</sup>Nuclear Regulatory Commission, "Evaluation of West Valley TRU and Waste Classification Limits," April 27, 1988.

## WASTE MANAGEMENT AREA 3 – HLW STORAGE AREA & VITRIFICATION FACILITY

### ALTERNATIVE IV

#### 3.4.1 DEIS Alternative Description

Under Alternative IV, the HLW tanks would continue to be managed as is with long-term monitoring, maintenance, and surveillance. The HLW storage area would be monitored for structural integrity and corrosion. Security measures would also be instituted. Vitrification facility systems would be flushed to remove any hazardous constituents, the exhaust stack would be removed and disposed offsite, alarm systems and security locks would be installed, and any exterior access doors would be welded shut. The security systems would be remotely monitoring, and periodic radiation surveys would be conducted. Regular inspections, painting, and repairs would be performed as required.

#### 3.4.2 Issues with HLW Storage Area/Vitrification Facility Alternative IV Description

There are two primary issues associated with Alternative IV as written. These are discussed below.

1. Satisfying NRC incidental waste guidance – Similar to Alternative III, it is assumed that a 3% heel remains in the HLW Tanks. Using this starting inventory and assuming a loss of institutional controls, the DEIS performance assessment indicates that the Performance Objectives in Part 61 will not be met. Under this scenario, the heel would still be considered HLW.
2. Best-case assumption regarding continued tank integrity – The DEIS assumed that, under Alternative IV, the HLW tanks would be monitored and maintained in their current condition until the required institutional control failure occurred. At that point, the tanks would be allowed to deteriorate. However, given the ongoing corrosion of the carbon steel tank structure – both measured and estimated – that is currently occurring, and given that this alternative also assumes a 3% heel with no decon during that 100-year monitoring and maintenance period, the likelihood that the tanks can retain their current integrity over this timeframe is doubtful. Extending this scenario to a 1000-year performance period, it is considered unrealistic, given current technology, to ensure tank integrity under a monitor and maintain configuration.

Monitoring would allow early detection of a release from the tanks, and corrective action could be taken, which differentiates this alternative from Alternative V. However, no attempt was made in the DEIS to predict early failure or to develop possible responses and associated costs and impacts.

Therefore, using a cost-benefit approach in alternative selection based on the current DEIS data may artificially make Alternative IV more attractive than it would be in actual implementation.

#### 3.4.3 Possible Responses to Issues

Even assuming greater waste removal from the tanks than the assumed 3%, the inability of this scenario to achieve satisfactory performance assessment results that meet the Part 61 performance objectives renders this a technically nonviable alternative for implementation, even with an NRC license in perpetuity.

Therefore, DOE and NYSERDA have indicated that an Alternative IV scenario for the tanks will not be considered during selection of a preferred alternative.

West Valley  
Citizen  
Task  
Force

December 22, 1998

Dr. Shirley A. Jackson, Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

RE: PUBLIC BRIEFING COMMENTS  
Commission Paper SECY-98-251  
Decommissioning Criteria For West Valley

Dear Chairman Jackson:

1           Initially, the West Valley Citizen Task Force (CTF) would like to thank the  
2 Commission for kindly accommodating our request for a postponement of the  
3 earlier scheduled public briefing regarding the proposed decommissioning criteria  
4 for the West Valley Demonstration Project site in SECY-98-251 (Paper). Since  
5 each member of the CTF was appointed to represent one of several unique  
6 constituencies, it is likely we would not have been able to schedule the necessary  
7 number of meetings required to discuss and formalize a consensus set of  
8 comments under the earlier time frame.

9           We would also like to thank the staff of the NRC for its active involvement in  
10 the meetings of the CTF over these last two years. NRC staff have attended  
11 meetings in West Valley, have participated in many of our meetings via video  
12 conference and on several occasions have briefed the CTF. In particular we wish  
13 to thank Jack Parrott for his attendance at our meeting on November 17, 1998,  
14 where he briefed us on the Paper.

15           The West Valley CTF began its mission in January, 1997 to develop a set of  
16 stakeholder guidelines and recommendations which were to be presented to the  
17 West Valley Site Managers (USDOE/NYSERDA) to aid in completing the EIS  
18 and selecting a preferred alternative for the completion of the West Valley  
19 Demonstration Project and long term management of the site. While



20 considering the many complex issues involving the twelve distinctive waste management areas  
21 and listening to numerous presentations explaining the rationale behind present radiation dose  
22 estimates for various exposure scenarios, the CTF questioned many times as to the apparent  
23 futility of discussing such risks or evaluating the various cleanup alternatives without knowing  
24 what NRC criteria and rules would apply to decommissioning and/or govern reliance on  
25 institutional controls. We had been informed on several occasions that the release of official  
26 NRC guidance on these subjects was forthcoming and we had hoped it would be available for our  
27 consideration during the final development of our July 1998 report.

28 And so it was with great anticipation that we received SECY-98-251. Having read the Paper  
29 and then convening a CTF meeting to discuss the proposal, it quickly became apparent that the  
30 Paper did not meet with the general expectations of the CTF. In fact, rather than resolving some  
31 of our outstanding questions it raised some new ones.

32 We would respectfully request that the Commission consider the following comments and  
33 recommendations submitted by the West Valley CTF prior to taking any official action to  
34 approve the approach presented for establishing decommissioning criteria for the West Valley  
35 site. Where indicated, references in brackets refer directly to the July 1998 CTF report found as  
36 Attachment 4 in the Paper.

37

#### 38 SECY-98-251 Suffers from a Lack of Clarity

39 We have found it difficult to determine the intended meaning of significant portions of the  
40 Paper. We have spent a lot of time debating the meaning of certain key concepts and how one  
41 part of the Paper may modify other parts. For example on page 4, the Paper states in part that  
42 "...the staff proposes to inform DOE and NYSERDA that they should use NRC's License  
43 Termination Rule criteria as proposed decommissioning criteria for that portion of the EIS that  
44 covers areas of residual waste or the closure of existing waste disposal areas." The criteria are  
45 then summarized to include unrestricted use criteria (25 mrem/year to average member of critical  
46 group plus ALARA requirements), restricted use criteria (25 mrem/year to average member of  
47 critical group plus ALARA requirements plus institutional controls) and a safety net or maximum  
48 exposure level in the event of the failure of institutional controls (100 or 500 mrem/year to  
49 average member of critical group plus ALARA requirements). However on page 5 the Paper  
50 states that "Because of long-term erosion and source-term release problems at the West Valley  
51 site, applying the NRC assumption of time-limited institutional control will likely make all

52 alternatives in the draft EIS that leave residual or stored waste on site, nonviable under the  
53 proposed decommissioning criteria...” It thus appears the Paper is recommending the use of  
54 criteria which cannot be achieved at this site. This recommendation, the acknowledgment that it  
55 is “nonviable”, and the lack of specificity on any other criteria leaves the CTF unsure as to what  
56 the Paper is proposing and what the NRC will have adopted should it approve this Paper.

57

#### 58 Much is already known about the West Valley Site

59 The Paper proposes that the “prescription of decommissioning criteria (by the Commission)  
60 will be better informed by the EIS.” The sentence from which this recommendation comes is  
61 preceded by a discussion on the criteria that will be used to justify a departure by DOE and  
62 NYSERDA from the requirements found in the License Termination Rule.

63 The CTF wishes to draw to the Commission’s attention that there has already been a draft  
64 EIS prepared for decontamination and decommissioning of the West Valley site. Although no  
65 preferred alternative was identified, the data contained in the draft EIS has not been called into  
66 question other than that to some extent more data has been sought. The draft EIS which was  
67 released in March 1996 is voluminous and exhaustive. It will be the basis for the new EIS. The  
68 characteristics of the waste at the site and its location are well known, as is the potential to cause  
69 harm to humans and the environment. The CTF does not believe the new draft or final EIS are  
70 necessary for the NRC to establish decontamination and decommissioning criteria at the West  
71 Valley site.

72

#### 73 CTF Alternative Recommendation

74 The March 1996 Draft EIS prepared by DOE and NYSERDA identified five alternatives for  
75 the West Valley site. Alternative I would entirely remove the waste while Alternatives II-V  
76 would permanently retain them on site. In the July 1998 CTF Final Report, the CTF essentially  
77 recommended a new alternative which combines long-term on-site storage for some hard to  
78 move wastes, with eventual removal off site.

79

80 Two Simple Questions

81

82 The CTF, in considering the Paper, poses two fundamental questions.

83

84 1. Should the Standard for the decontamination and decommissioning of the West Valley  
85 site be different than that for the rest of the country?

86

87 2. Should the NRC deviate from its normal practice in which it sets in advance clear,  
88 objective standards for the protection of human health and the environment so as to  
89 guide, influence and finally judge proposed activities?

90

91 The CTF has concluded that the answer to both questions is no.

92

93 Decontamination Standard

94 The NRC, in its License Termination Rule (10 CFR Part 20, Subpart E), established criteria  
95 which must be met in order for a license to be terminated. For purposes of the West Valley site,  
96 the part of the Rule which is most relevant deals with the length of time that institutional controls  
97 can be relied upon to maintain protective features and establishes a maximum allowable  
98 exposure should institutional controls fail. The Paper proposes that the NRC allow that these  
99 standards be “departed” from if the EIS shows “some justification” regarding the balance  
100 between gain and harm or prohibitively high cost or technical infeasibility. This could be done  
101 so long as there is a “sufficient level of protection of human health and safety and the  
102 environment and a reasonable balance of costs and benefits and represents a viable approach.”  
103 The Paper also states “Besides cost, offsite removal of significant amounts of waste may be  
104 difficult to implement because of a lack of access to offsite waste disposal. Relocating the  
105 radioactive waste may be controversial and may substantially delay site decommissioning and  
106 closure.”

107 From these statements it appears that the Paper is proposing that the West Valley site be  
108 decommissioned to a less protective standard because to meet the License Termination Rule  
109 standards would be costly, time consuming, controversial and prolonged. These same factors  
110 will be present at most if not all other sites to which the License Termination Rule will apply  
111 across the nation. Even if the West Valley site is more costly, more time consuming, more

112 controversial and have more delays, we believe the standards for determining if the site is  
113 sufficiently safe to allow it to be declared decontaminated and decommissioned should still be  
114 the same as those for the rest of the nation. The Paper does not indicate nor justify why West  
115 Valley should be treated differently. We call on the NRC to reject this approach.

116 We prefer instead that the NRC apply the standards in the License Termination Rule, that it  
117 recognize that decontamination and decommissioning of the West Valley site may not be  
118 possible for a prolonged period of time and that certain interim protections must be taken. We  
119 reject any attempt to weaken standards due to the difficulty in having them implemented or the  
120 delay that may be inherent in a preferred alternative.

121 If the NRC does not apply the License Termination Rule to West Valley, it may have to  
122 conduct a separate NEPA proceeding to support a unique decontamination and decommissioning  
123 standard for West Valley.

124

#### 125 Prescribe or "Postscribe"

126 The Paper proposes that the NRC adopt an "approach" for the setting of requirements but  
127 that the formal adoption of standards occur at a later date, after the development of a draft or  
128 final EIS. In most circumstances the NRC has set in advance clear, objective standards for the  
129 protection of human health and the environment so as to guide, influence and finally judge  
130 proposed activities. Both based on the sound past practice of the NRC and based on a plain  
131 reading of the West Valley Demonstration Act, the NRC should prescribe (that is set in advance)  
132 standards for the Decontamination and Decommissioning of the West Valley site.

133

#### 134 Delaying Prescription of Definitive Criteria

135 As noted, it had been anticipated that the NRC was preparing a definitive set of  
136 decommissioning criteria which the USDOE and NYSERDA would necessarily have to aspire to  
137 comply with in the completion of the EIS and final selection of a preferred alternative for cleanup  
138 of the site. Rather, NRC staff are asking the Commission to merely approve an "approach" to  
139 developing criteria which, in reality, only serves to delay that official action which is required by  
140 the WVDP Act. The CTF believes that the establishment of such criteria would not just be a  
141 "significant component" of an EIS as stated in the Paper's summary (p. 1), but should be a  
142 prerequisite. Furthermore, we are perplexed by the statement on p. 3 whereby if the preferred  
143 alternative does not conform to the presently proposed decommissioning criteria, then

144 DOE/NYSERDA might “propose alternative criteria” and staff would then subsequently propose  
145 a new approach for approval by the Commission. We clearly do not understand under what  
146 authority or by what precedent a regulated agency could, in effect, prescribe the rules under  
147 which they are governed. This is clearly the province of NRC alone.

148 At various times the CTF has been reassured by staff from all involved agencies that  
149 protecting both worker and public health and safety is the single most important criterion relied  
150 upon when making site management decisions. We felt so strongly about this issue that several  
151 references were incorporated into our report [see Section III, Items 1 and 17; Section IV, Item 2].  
152 NRC has already established definitive allowable radiation dose rates on a national basis in the  
153 License Termination Rule. Should acceptable dosage rates not be the same for all  
154 communities/populations, irrespective of geographical location? The CTF contends that the  
155 NRC should establish firm criteria now, not just flexible guidance. Detailed EIS analyses of long  
156 term risks and short term implementation risks for the various alternatives should not be based on  
157 assumptions of what the applicable decommissioning criteria might be. The preferred alternative  
158 which will be developed in this process should be tailored to meet the NRC’s “prescribed”  
159 criteria, not vice versa.

160

#### 161 Facilitating DOE Fulfillment of WVDPA Requirements

162 Should the NRC approve the proposed approach it would give the obvious impression that  
163 they are providing DOE extraordinary leeway in completing the EIS, fulfilling WVDP Act  
164 requirements, and thereby facilitating DOE’s accelerated departure from the site. The CTF has  
165 taken the position that a continued federal presence at the site will be essential to implementing  
166 any preferred alternative cleanup, due to multiple factors including the burden of costs, necessary  
167 reliance on defined institutional controls, the continued presence of wastes that originated from  
168 DOE activities or came from other non-commercial sources, etc. [see Section III, Item 18;  
169 Section IV, Items 8 and 9].

170 Furthermore, it appears that by broadening the definition of the term “decommissioning  
171 criteria” and applying the “incidental waste” classification to residual HLW in the tanks at West  
172 Valley, that NRC is going to great lengths to keep every option open to DOE and paving the way  
173 for an expedited federal exit. The CTF recognized in the July report that some wastes will need  
174 to remain at the site for a prolonged period of time, but that the only appropriate final action is  
175 eventual removal from the site [Section III, Item 5].

176 Concerns With Extended Institutional Control

177 Perhaps the greatest shortcoming of the Paper is the failure to resolve the critical questions  
178 concerning establishment of definitive guidelines for allowing extended use of institutional  
179 controls (IC). 10 CFR 61 clearly states that IC cannot be relied on for more than 100 years, and  
180 everyone unequivocally agrees that the West Valley site has significant nondesirable  
181 characteristics that preclude indefinite reliance on active-maintenance IC. The CTF believes that  
182 the concept of an "unlimited" IC period as assumed in the DEIS is a nonviable option [Section  
183 III, Items 3, 4, 13 and 15; Section IV, Items 3 and 5]. Additionally, the NRC should not consider  
184 relegating their authority to say what kind of institutional controls are appropriate to rely upon.  
185 Especially not to the USEPA which has altogether different criteria.

186 The CTF believes (based on currently available information) the site is not suitable for the  
187 long-term, permanent storage or disposal of long-lived radionuclides and that final action with  
188 regard to these wastes is for them to be removed from the site. (Section III, Items 3 and 5). The  
189 CTF may reconsider its opinion of site suitability if new evidence based on site characterization  
190 is presented to the CTF in the near future. The CTF further understands that certain factors could  
191 result in interim onsite storage with associated IC. Several assumptions made were that over  
192 time permanent disposal options may develop, or new treatment/remediation technologies would  
193 be discovered, or that a prescribed period of natural radioactive decay would make exhumation  
194 of certain wastes safer at a later date. [Section III, Items 9 and 11; Section IV, Item 10]. For all  
195 of these reasons the CTF recommended a path of retrievable interim storage with IC and eventual  
196 off site disposal. Again, we feel that definitive NRC requirements for reliance on IC are a  
197 prerequisite to the meaningful risk analyses required for completing the EIS and selecting a  
198 preferred alternative.

199 The CTF recognizes that portions of the Center are not fully characterized and therefore  
200 cannot be judged with certainty to be either suitable or unsuitable for long-term, permanent  
201 storage or disposal of wastes under current regulations. Under present conditions, the CTF does  
202 not believe that any portion of the Center can be considered suitable for long-term, permanent  
203 storage or disposal of wastes.

204

205 Application of Incidental Waste Rule

206 The proposed classification of residual HLW as incidental waste is a new concept not  
207 previously presented to the CTF. The NRC staff proposal indicates that the resulting treated

208 waste will not exceed applicable limits for Class C LLW as per 10 CFR 61. Without sufficient  
209 additional information as to the treatment methods, specific waste characterization, and estimated  
210 volumes of waste involved, it is difficult to make an informed assessment of the appropriateness  
211 of applying such criteria. Regardless, as presently proposed the criteria are merely a suggested  
212 guideline, or worse, a deliberate means of allowing DOE to reclassify the HLW collected from  
213 tank residue and decontamination of the process building and vitrification facility as LLW.  
214 Again, this position would allow DOE to be absolved of responsibility, whereafter NRC will  
215 reinstate the State license and hold New York wholly accountable for meeting the latent NRC  
216 criteria.

217 In summation, the CTF is resolutely opposed to the approval of SECY-98-251 in its present  
218 form. The proposal does not set forth decommissioning criteria as advertised but rather is seen  
219 as a guise for providing DOE defacto authority to dispose of their wastes onsite at the eventual  
220 expense of New York. NRC has a statutory obligation to make discretionary decisions at West  
221 Valley on the critical issues of decontamination and decommissioning, disposal, license  
222 resolution, institutional controls, and has statutory authority to make discretionary decisions on  
223 the definition of transuranic waste. This proposal if approved will render no actual decision on  
224 any of these subjects and perhaps will only add considerably more confusion to the perceived  
225 role of NRC in regulating the decommissioning and long term management of the West Valley  
226 facilities. Approval of this approach which defers any decisions of consequence until after the  
227 EIS is completed, will certainly erode future NRC authority. Public suspicion of collusion  
228 between NRC and DOE should also be expected.

229 The West Valley CTF urges the Nuclear Regulatory Commission to contemplate the  
230 following suggested actions:

231 1. Disapprove the approach to setting decommissioning criteria for West Valley as  
232 proposed by NRC staff in SECY-98-251.

233 2. Comprehensively re-examine present policy concerning the NRC/DOE relationship and  
234 also ponder the obligatory role of NRC in fulfilling their regulatory responsibilities from legal,  
235 social, and ethical perspectives. The CTF believes that such policy decisions warrant the highest  
236 level of consideration.

237 3. Direct staff to develop a policy statement for Commission approval, prior to completion  
238 of the EIS, setting forth the definitive criteria for decommissioning at West Valley which are  
239 consistent with all statutory requirements.

240 4. Direct staff to develop a policy statement for Commission approval, prior to completion  
241 of the EIS, setting forth definitive criteria for allowing time-limited institutional controls which  
242 are consistent with all statutory requirements.

243 5. Direct staff to develop a policy statement for Commission approval setting forth a clear  
244 definition of incidental waste for West Valley and whether such definition conflicts with policy  
245 already set for transuranic waste.

246 6. Direct staff to develop a policy statement for Commission approval setting forth the  
247 criteria for reinstating the NRC license following completion of the WVDP.

Respectfully submitted,

West Valley CTF

# Seneca Nation of Indians

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January 11, 1999

Commissioners  
Nuclear Regulatory Commission  
Washington DC 20555-0001

**SUBJECT: SECY-98-251; (proposed) Decommissioning Criteria for West Valley**

Dear Sirs and Madams:

We have completed our review of document SECY-98-251 and respectfully submit the following comments and concerns in lieu of presenting the material at the public briefing scheduled for January 12 in Washington DC.

The West Valley Nuclear Services Center (WVNSC) is on the aboriginal land of the Seneca People. Seneca Territory once encompassed all of western New York, as well as parts of Ohio and Pennsylvania. Now only three small territories remain in our possession. The Cattaraugus territory of the Seneca Nation of Indians is approximately 25 miles downstream of the West Valley site. This land was pristine before the WVNSC was established; however, the site has since become contaminated with radioactive substances having half lives of thousands of years. Failure of the West Valley site integrity will result in the exposure of our people to potentially high doses of radioactive substances if wastes remain at the site. We cannot afford any compromise of our remaining lands due to contamination from the West Valley site.

Specifically, we are concerned with the flexibility the Nuclear Regulatory Commission (NRC) is affording the Department of Energy (DOE) in the decommissioning process. It appears that the NRC staff is allowing the DOE to propose its own decommissioning criteria, which the NRC staff will then recommend for approval by the Commission. We fear the selection of decommissioning criteria will be based on cost effectiveness rather than public health, safety, and environmental protection.

We are concerned that the NRC and the DOE are not fully considering the potential problems of stewardship and long-term institutional control. This may seem like an attractive cost-effective option now, but can site control be enforced and maintained? Will long-term institutional control be cost effective in the long term or will it become increasingly expensive as engineered controls fail and must be replaced with more complex solutions? We are also concerned that alternatives which rely on stewardship and institutional controls shift the responsibility of remediation and clean up to future generations, rather than placing responsibility on the generation that caused the problems. Furthermore, we do not believe that the State of New York has the ability to provide effective long-term stewardship at the site and the responsibility for long-term stewardship.

In conclusion, the Seneca Nation hereby recommends that the Commissioners do not approve of the approach described in this paper. We recommend that the NRC prescribe the 25 mrem/year decommissioning criteria to ensure the continued health and safety of the people who live in this area, and the environment which sustains them. The prescription of the decommissioning criteria should occur prior to the DOE and New York State Energy Research and Development Authority (NYSERDA) Record of Decision in order to make full use of the National Environmental Policy Act process. The NRC must recognize its federal trust responsibility to protect the safety and well-being of tribal members.

Our detailed comments on SECY-98-251 follow.

Sincerely,

A handwritten signature in black ink, appearing to read "Duane J. Ray", with a long horizontal line extending to the right.

Duane J. Ray, President  
SENECA NATION OF INDIANS

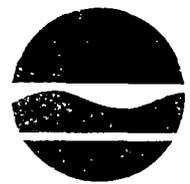
CC: Tribal Councilors and Executives  
Environmental Protection Department

New York State Department of Environmental Conservation

Office of Air & Waste Management, Room 608

50 Wolf Road, Albany, New York 12233-1014

Phone: (518) 457-1415 FAX: (518) 457-9629



John P. Cahill  
Commissioner

JAN 06 1999

The Honorable Shirley Ann Jackson  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Ms. Jackson:

On behalf of the New York State Department of Environmental Conservation (NYSDEC), I would like to thank the Commission for the opportunity to comment on document SECY-98-251, Decommissioning Criteria for West Valley. Enclosed with this letter are NYSDEC's written comments. We have also accepted the Commission's invitation, transmitted to us by Bill Hill of your Secretary's Office, to allow NYSDEC staff to present our comments to them in person at the Tuesday, January 12, 1999 meeting in Washington, D.C.

We look forward to meeting with the Commissioners on this issue, which is extremely important to the State of New York.

Sincerely,

Carl Johnson  
Deputy Commissioner

Enclosure

New York State Department of Environmental Conservation  
Comments on the United States Nuclear Regulatory Commission Paper  
*Decommissioning Criteria for West Valley, SECY-98-251*  
December 23, 1998

**1. The Commission should formally acknowledge the status of New York State as a co-regulator at the WNYNSC.**

In the Commission Paper, the Nuclear Regulatory Commission (NRC) should explicitly acknowledge that the State of New York is a co-regulator of the Western New York Nuclear Services Center (WNYNSC) at West Valley. The State is involved in a regulatory capacity at the site through several avenues.

First, through our capacity as an Agreement State regulatory agency, the New York State Department of Environmental Conservation (NYSDEC) is responsible for environmental permitting and oversight of site monitoring and maintenance for the formerly operated State-licensed Waste Disposal Area (SDA) at West Valley, and over the areas of the site not controlled under the federal West Valley Demonstration Project Act (WVDPA) and not covered by the NRC license currently in abeyance. NYSDEC will have regulatory authority over any areas of the site which are "free released" by NRC. As such, NRC should seek the concurrence of NYSDEC on cleanup levels and any residual activity left on these areas prior to NRC releasing those areas.

Next, as the environmental agency of New York State, NYSDEC has regulatory authority under the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act, the Clean Water Act, the Clean Air Act, and corresponding State laws and regulations. NYSDEC has signed a 3008(h) Consent Order with DOE and NYSERDA to address hazardous waste at the site. It is important that any decision regarding radiological site decommissioning be acceptable from a RCRA standpoint, since the two waste forms are co-mingled in many of the site areas.

Further, NYSDEC is also involved in the environmental impact statement (EIS) process. We are a *cooperating agency* under the National Environmental Policy Act and an *involved agency* under State Environmental Quality Review Act (SEQRA).

Finally, In its role as an Agreement State regulatory agency, the New York State Department of Labor (NYSDOL) is the radioactive materials licensing agency for the SDA. The New York State Department of Health (NYSDOH), another New York State Agreement State agency, conducted radiological environmental surveillance around the site in the 1960s and from 1982 to the present (NYSDEC conducted the program from 1970 through 1981).

**2. NYSDEC recommends that NRC and the NYSDEC enter into a Cooperation Agreement on regulating the closure of the West Valley site.**

In 1991, NYSDEC entered into a Cooperation Agreement with the NRC regarding the decommissioning of the former Cintichem medical isotope production reactor and hot lab facility in Tuxedo, New York, another co-regulated site in New York State. This cooperative process worked very well at that site and we hope that the Commission will recognize the practicality of such an agreement. While the situation at the WNYNSC does not directly parallel that at the former Cintichem facility, there are enough similarities between the two, and much greater regulatory complexity at the WNYNSC, to warrant a similar cooperative approach.

Due to the NRC's and the State's regulatory responsibilities at this site (the State's include radioactive materials as well as solid waste, hazardous waste, water, and air), we believe it is imperative that such a cooperative approach be utilized for establishing criteria for a decision on final site disposition that encompasses all involved regulatory agencies and potential environmental impacts. Any non-comprehensive approach to establishing said criteria is not in the best interests of the people or environment of the State of New York and may result in less expeditious cleanup, greater costs, and a lesser level of protection for our environment and residents.

NYSDEC proposes that NRC and the NYSDEC radiological regulatory agencies meet in the near future to discuss creation of a West Valley cooperation agreement. This agreement should be in place prior to adoption of criteria used to approve final site disposition. NYSDEC appreciates the verbal assurance of NRC staff that they wish to work cooperatively with our Department; however, it is in the best interests of all parties to formalize such an approach.

**3. Dose-based criteria should include all pathways and should apply to the entire site.**

NYSDEC acknowledges that the SDA is not included in either the NRC's role as licensing agency for the former fuel reprocessing facility nor the regulatory mandate given to the NRC by the Act to develop site decommissioning criteria. Regulatory authority for the SDA currently rests with the State of New York. However, from the perspective of releases to the environment of radioactive and non-radioactive contaminants, the WNYNSC is one site. Division of the WNYNSC along lines of regulatory responsibility is not the best option because releases of residual material from the various areas of the site have the potential to follow the same environmental exposure pathways. Any decommissioning and closure criteria expressed in terms of a potential radiation dose (such as the NRC's decommissioning rule) must take into account the combined impacts from all sources on the site.

This approach would be consistent with the definition of "residual radioactivity" in the NRC's decommissioning rule; i.e., "residual radioactivity . . . includes radioactivity from all licensed and unlicensed sources used by the licensee . . ." [10 CFR 20.1003]. Therefore, the decommissioning criteria established for the site must take into account all potential releases, not just those from one area of regulatory jurisdiction. The NRC should clarify this point as soon as

possible, preferably before DOE and NYSERDA progress much further toward developing their preferred alternative. The Cooperation Agreement proposed in comment 2 would be an appropriate vehicle for establishing such site-wide criteria.

**4. The criteria NRC adopts for the West Valley Demonstration Project should apply to NYSERDA once the Demonstration Project is completed.**

The Commission Paper does not make it explicitly clear that the decommissioning criteria that are finally adopted will continue to apply after DOE has met their obligations under the WVDPA. Since the NRC has been tasked by Congress under the Act with developing these criteria for the Demonstration Project, any such criteria could be construed to be applicable for only the Demonstration Project. NRC should be very clear on the scope of applicability of any criteria they develop.

NYSDEC expects that any decommissioning criteria developed for the site under the mandate of the WVDPA would be the same as for the post-WVDPA site. Not only should NRC and NYSDCE agree that the decommissioning criteria apply to the site as a whole, but these criteria should also apply throughout the whole time frame of the site decommissioning process.

**5. NYSDEC's *Cleanup Guideline for Soils Contaminated with Radioactive Materials* is an ARAR.**

As an Agreement State agency, NYSDEC will adopt regulations compatible with NRC's Decommissioning Rule within the allotted three-year time frame. Until that rulemaking is completed, our Technical Administrative Guidance Memorandum-4003, "Cleanup Guideline for Soils Contaminated with Radioactive Materials" (TAGM-4003), is our current applicable, relevant and appropriate regulation (ARAR) for release of areas of soil contamination under the West Valley decommissioning process (our TAGM-4003 is compatible, albeit more restrictive than NRC's Decommissioning Rule). Therefore, any areas of the site that are designated for free-release during this process would be subject to TAGM-4003 (copy attached).

**6. The NRC should prescribe the criteria before the Record of Decision is issued.**

NYSDEC can find no adequate justification in SECY-98-251 for delaying prescribing criteria for clean up of the WNYNSC until after the Record of Decision (ROD) has been signed. This is not explained by the need for the flexibility built into the recommendations, which allow DOE and NYSERDA to propose alternative limits if they cannot meet the proposed limits taken from the NRC's Decommissioning Rule. The normal process is for a regulatory agency to determine the appropriate existing limits, or create appropriate site-specific values, prior to reaching a Record of Decision on the appropriate site cleanup approach. Instead, NRC staff have proposed that DOE, NYSERDA, and NRC reach a Record of Decision without any formal criteria against which a decision can be made.

On page five of the Commission Paper it states,

“The EIS will evaluate the potential impacts of various decommissioning alternatives, and is expected to support NRC’s selection and prescription of decommissioning criteria for WVDP completion and site closure. NRC staff plans to rely on the results of the EIS to recommend for Commission consideration final decommissioning criteria for West Valley. If DOE/ NYSERDA depart from any of the proposed criteria described in this paper to complete the EIS, the EIS will need to show some justification . . . .”

NYSDEC is concerned with the circular logic of this passage. It is not clear how the EIS can support the NRC’s criteria if the NRC will not prescribe them until after the preferred alternative is chosen and the ROD is in place.

NYSDEC strongly recommends that SECY-98-251 be modified to change the sequence of events in the “Proposed Process for Establishing Decommissioning Criteria” by having the Commissioners approve site decommissioning criteria after selection of the preferred alternative and before the ROD.

#### **7. NRC should provide specific guidance on justifying alternative criteria for the West Valley site.**

It is apparent on page five of the paper that NRC staff expects there will be some areas on the site where DOE and NYSERDA cannot meet the proposed criteria under any of the alternatives that have been presented in the DEIS, except for complete removal of all material from the site. NYSDEC agrees with this assessment. If a prudent review of the decommissioning and disposal options convinces DOE and NYSERDA that they cannot realistically meet the criteria, they would then have to present in the EIS strong justification for proposing any site cleanup and closure alternative that does not meet those criteria. A guidance which DOE and NYSERDA can follow when attempting to justify an alternative criterion needs to be developed. The rationale for implementation needs to be concise in terms of an acceptable balance between reduction of risk versus cost associated with all aspects of removal of the “hazard” from the site; the hazards to the environment, the public, and site employees; and costs to the State and Federal Governments. Risks including, but not limited to, risks expected during normal operation of a long-term site maintenance program, radiation exposures and other risks posed by excavation and recovery operations, transportation and site restoration during the ultimate removal and cleanup, must all be taken into account when calculating any risk/benefit balance developed under any proposed alternative.

NRC staff appear to have taken this same position, but without first setting out clear guidelines for DOE and NYSERDA to follow when proposing such an alternative. Such guidelines are necessary in order to ensure adequate protection of the environment and the residents of our State. NYSDEC believes that it is imperative that such guidelines be set and is willing to work with NRC staff to develop them.

**8. NRC should explain the three long-term management alternatives.**

NRC staff have identified three regulatory alternatives for long-term site management if DOE and NYSERDA can demonstrate that such long-term control is necessary. We have the following comments about the regulatory alternatives identified by NRC staff for potential long-term institutional control of the site:

1) Issuance of a long-term NRC license (potentially for > than 100 years) until such time as the hazard is removed from the site. - It is unclear from the paper how NRC envisions this option would be implemented. NRC staff should include a discussion of the possible circumstances under which such a long-term license would be appropriate.

2) Seeking new legislative authority. - NRC has not made it clear why they would need further legislative authority to approve a long-term institutional control alternative proposed by DOE and NYSERDA. NRC staff should elaborate on the need for such expanded authority.

3) Transferring the regulation of the decommissioning process to the United States Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). - We have verified with EPA that this would be a viable alternative. However, we also agree with NRC staff that this is the least acceptable of the listed options. The radioactive materials licensing at this site was performed by the NRC and the State of New York. As the licensing authorities, we are the appropriate entities for regulating the decommissioning and closure of the site. However, since NRC has raised this possible option, NYSDEC requests that the Commission Paper be revised to clarify the circumstances under which NRC believes they may need to relinquish authority over the site to the EPA.

**9. Any new radioactive waste disposal units must comply with current regulations.**

Under the alternatives listed in the DEIS, there is the potential for the creation of new waste disposal cells on the site. If an option is accepted that includes such a cell, NYSDEC expects that its design and construction will be carried out in such a manner as to meet the substantive requirements of 6 NYCRR Part 382 and Part 383.

**10. NRC must apply 10 CFR 61.55 and DOE must take responsibility for GTCC waste.**

If any Greater Than Class C (GTCC) waste is to remain on the WNYNSC, NYSDEC expects that as the responsible authority, the DOE will maintain a presence at the site until such time as the waste is removed or the potential doses to the public reach the point at which no further controls on access or use of the site are needed.

Under the federal Low-level Waste Policy Act, states are only responsible for disposal of commercially generated Class A, B, and C low-level radioactive waste. Furthermore, 10 CFR Part 61 (§ 61.55(a)(2)(iv), effective on June 26, 1989) states,

“Waste that is not generally acceptable for near-surface disposal is waste for which form and disposal methods must be different, and in general more stringent, than those for Class C waste. In the absence of specific requirements in this part, such waste must be disposed of in a geologic repository as defined in Part 60 of this chapter unless proposals for disposal of such waste in a disposal site licensed pursuant to this part are approved by the Commission.”

Therefore, NYSDEC would expect that all GTCC waste would be removed from the site in a timely manner for final disposition at a federal repository as required by the NRC in Part 61. However, given the hazards involved in exhuming the GTCC waste already interred at the site, we are willing to consider leaving it in place for an extended period, provided that the Federal Government makes a concrete commitment to maintain a presence at the site for as long as this waste is on the WNYNSC, in order to ensure adequate protection of the environment and the health of the people of the State of New York.

NYSDEC expects that the NRC will acknowledge the need for a federal commitment to maintain a presence at the WNYNSC in SECY-98-251.

**11. The Decommissioning Criteria should apply to on-site and off-site contamination.**

NRC should clarify the jurisdiction of the NRC license (currently in abeyance) over the WNYNSC. In particular, we refer to the presence of surface soil contamination both on and off of the WNYNSC, but outside of the WVDP area. This contamination resulted from accidental releases from the former fuel reprocessing operation licensed by the NRC. The definition of "residual radioactivity" in the decommissioning rule includes "radioactive materials remaining at the site as a result of routine or accidental releases of radioactive material." The NRC should make it clear that the criteria will apply to such radioactive material on and near the WNYNSC.

**12. The NRC should address the difference between the decommissioning of an operating facility and the closure and stabilization of radioactive waste disposal sites.**

NYSDEC questions the NRC's broad interpretation of the term "decommissioning criteria." The decisions to be made regarding the final disposition of the WNYNSC are, in fact, complicated by the unique nature of the site in that it does not fit the standard scenarios for which existing regulations were written. The presence of an operational facility in need of decommissioning, high-level waste tanks to be closed or removed, a pre-Part 61 federally licensed waste burial area, an interim storage area (the drum cell), and a pre-Part 61 Agreement State licensed waste burial area, make it a difficult site for which to develop criteria. However, we do not agree with characterizing the clean up of all of these areas under an expanded definition of the term "decommissioning criteria."

In its regulations, NRC recognizes the difference between decommissioning of an operational facility (addressed in 10 CFR Part 20) and closure and stabilization of a waste disposal facility (addressed in 10 CFR Part 61). The distinction is drawn in Section 20.1401, *General Provision and Scope*, of the decommissioning rule, which states, "For high-level and low-level waste disposal facilities (10 CFR parts 60 and 61), the criteria apply only to ancillary surface facilities that support radioactive waste disposal activities." We recognize that neither the SDA nor the NDA were designed or operated to meet 10 CFR Part 60 or 61. Nevertheless, they both were commercial disposal facilities and their scope of operations of which exceeded what was envisioned in the former 10 CFR 20.302 and 20.304 (burials authorized under those regulations are included in the definition of "residual radioactivity" in the decommissioning rule).

The distinct differences between the types of areas on the site, and the differences in the approach required to properly close them, should be addressed in SECY-98-251.

**13. The terms referring to the WNYNSC and its subdivisions should be used consistently.**

In the Commission Paper, SECY-98-251, the section entitled *Purpose* contains the phrases "West Valley Demonstration Project," the "West Valley site," and the "site," but the NRC staff does not clearly explain the current division of the property or how they apply these descriptions to them.

The "West Valley site" apparently refers to the 3,345-acre WNYNSC, which was originally created by New York State with the intent of developing a multipurpose center for nuclear technologies. The "West Valley Demonstration Project" refers to that 200-acre portion of the site currently controlled by the DOE under the WVDPA in order to demonstrate the feasibility of a process for vitrification of liquid high-level radioactive waste stored in underground tanks at the site. Immediately adjacent to that 200-acre parcel is a former commercial radioactive waste land burial facility regulated by the State of New York under the Agreement States program.

The paper should use the appropriate term to clearly indicate the portion of the site being addressed.

Attachment

# TAGM

Insert in

TECHNICAL MANUAL

Memorandum: 4003 Page 1 of 6

Subject: Cleanup Guideline for  
Soils Contaminated with  
Radioactive Materials

Date: SEP 14 1993

- New  
 Obsolete  
 Supersedes Memo No. \_\_\_\_\_

## I. PURPOSE

This TAGM describes the policy and procedure to be followed by Division of Hazardous Substances Regulation, Bureau of Radiation staff in evaluating cleanup plans for soils contaminated with radioactive materials.

The purpose of this cleanup guideline is to provide for:

- (1) protection of public health and the environment, and
- (2) consistency in implementing remedial actions at sites contaminated with radioactive materials.

## II. POLICY

The total effective dose equivalent to the maximally exposed individual of the general public, from radioactive material remaining at a site after cleanup, shall be as low as reasonably achievable and less than 10 mrem above that received from background levels of radiation in any one year.

The radiation dose received from an exposure to soils contaminated by radionuclides will strongly depend on the time of exposure and pathways by which the radionuclides or their decay products can come in contact with an individual. For this reason, the estimated annual dose resulting from exposure to any residual radionuclides in the contaminated area is the basis for establishing site-specific cleanup criteria. The dose estimate is to be based on the contaminating radionuclides, but not on background concentrations of any radionuclides that may be at the site. Background radiation refers to:

- (1) local area concentrations of naturally occurring radionuclides,

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(2) cosmic radiation, and

(3) radionuclides of anthropogenic origin which have been regionally dispersed and are present at low concentrations (such as fallout from the testing of nuclear weapons).

### III. PROCEDURE

The process of determining the appropriate cleanup requirements will generally involve measurements of radioactivity at the site, laboratory analysis of soil samples for concentrations of radioactive materials, modeling of expected doses based on the measurements and analyses performed, and evaluation of site remediation alternatives. The modeling will require determination of site characteristics critical to the migration of radionuclides, and will need to be referenced to reasonable scenarios for current and plausible future uses of the land. Consideration of the time period during which the radioactive material is expected to persist at the site will be important in the selection of scenarios for land use. The estimated dose limit of 10 mrem/year refers to land released for unrestricted use. If unrestricted use scenario calculations result in dose estimates that are greater than 10 mrem/year, it may be necessary to invoke institutional controls and/or deed restrictions so that actual doses from allowed uses are not likely to exceed 10 mrem/year.

#### A. Dose Analysis Methods

Analysis methods used must be acceptable to the DEC Division of Hazardous Substances Regulation, Bureau of Radiation. The methods used should be appropriate to the complexity of the contaminated site and to the potential for harm. The primary criterion is that the analysis yield conservative results, i.e., the results of the analysis, must predict doses no lower than are likely to actually occur. This principle should be applied to both

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the analysis methods and to the site-specific inputs required for any models used in the evaluation.

All reasonable pathways of exposure shall be considered when determining the estimated dose to individuals. Approval of the procedures used in, and the interpretation of, each step of the analysis must be obtained from NYSDEC. The steps to be followed are:

1. Perform a site assessment. This involves determining exposure levels at the site, the extent of the contamination, and concentrations of radionuclides in the contaminated areas. Care must be taken that the appropriate instrumentation is used for detecting radiation at the site (gamma, beta, alpha, or neutrons). Concentration profiles as a function of depth in the soil should be determined. Where possible, the chemical and physical forms of the radionuclides should be determined. It should be possible from this data to characterize the locations and concentrations of all radionuclides which can significantly contribute to the dose potentially received from the site. When modeling the site characteristics, and the migration of radionuclides within and from the site, it will be necessary to show that the site parameters used will cause the dose estimates to be conservative.

During on-site investigation, staff and contractors must abide by all appropriate requirements and Departmental policies related to personal protection and by any applicable health and safety plans. At sites where non-radioactive contaminants are known to be present, staff should contact appropriate persons from other involved Bureaus, Divisions, or Agencies as to health

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and safety and coordination of activities. If non-radioactive chemical contamination (where not previously known) is suspected at a site, be it by observation and/or analysis, the appropriate regulatory staff should be notified.

2. Provide a review of current land use and a rationale for potential use of the site. Use this information to estimate possible occupancies for the site and review how different plausible uses of the site can contribute to exposures. Keep in mind that the maximally exposed individual of concern is a member of the general public not associated with the use of radioactive materials. This is usually a resident, but may also be a worker at a business not licensed to use radioactive materials. Radiation exposure to workers at facilities with radioactive materials is regulated by the licensing agency under the New York State Industrial Code (New York State Department of Labor) or the New York State Sanitary Code (New York State Department of Health).
3. Analyze all reasonable pathways. Only when pathways can be shown to contribute insignificantly to the dose, can they be eliminated from further consideration. Pathways that must be considered are:
  - (a) Doses from direct exposure to radiation emitted from the contaminated soil and, where applicable, from contaminated ground or surface water.
  - (b) Doses from internal exposure - including inhalation of contaminated dust (including radon progeny if present), ingestion of contaminated soil, ingestion of food raised on contaminated

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soil, and ingestion of drinking water  
(both aquifer and surface waters) or  
contaminants from irrigation water.

## B. Analysis of Remediation Alternatives

Remediation techniques should be evaluated for effectiveness at meeting the 10 mrem/year dose limit, at keeping radiation doses as low as reasonably achievable, and at minimizing the creation of radioactive waste. If site remediation is needed to achieve the 10 mrem/year dose limit, it will be necessary to prepare a work plan that is acceptable to NYSDEC and other cognizant agencies (NYS DOL, NYSDOH).

Acceptable remediation procedures might include:

- (1) Removal of contaminated soil for disposal at a licensed facility.
- (2) Isolation of contamination such as covering the contamination with clean soil. This technique may be acceptable for short-lived isotopes assuming that restrictions to land use are used until the radionuclides no longer pose a threat.
- (3) Other remediation techniques, if applicable, considered and approved on a case-by-case basis.

Remediation alternatives should be evaluated for exposures which will occur to workers, staff and the general public during corrective action/remedial activities. Appropriate health and safety plans should be prepared or referenced for construction and monitoring activities (see also item C.(1) below).

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Remedial alternatives should also be evaluated for the potential to cause significant damage to sensitive environmental or historical areas (see also item C.(2) below).

Special consideration must be given to sites contaminated with non-radioactive chemicals as to remedial alternatives and disposition of the resultant hazardous or "mixed" waste.

Before a site can be released for unrestricted use it will be necessary to confirm that the approved work plan has been completed successfully. This confirmation will include measuring exposure rates and/or measurements of residual radionuclide concentrations. The final modeling step will need to show that release of the site, with any radionuclide concentrations still remaining after remediation, will not cause the dose limit to be exceeded.

## C. Alternative Procedures

There may be incidents/situations whereby:

- (1) the health and safety of individuals involved in a cleanup may necessitate acceptance of a dose greater than 10 mrem/year to the maximally exposed individual, or
- (2) the cleanup may cause irreversible destruction or loss of environmental habitat.

In such situations, remedial options will be evaluated on a case-by-case basis. Final decisions will be made by the Chief, Bureau of Radiation.

**From:** Janet Schlueter  
**To:** Annette Vietti-Cook, Daniel Gillen, James Smith,...  
**Date:** Fri, Jan 22, 1999 10:22 AM  
**Subject:** WEST VALLEY TRANSCRIPT

FYI - Yesterday, Jim Turi, DOE called me to correct a statement that was made by NYDEC during the 1/12/99 Commission briefing on West Valley. Specifically, Mr. Merges, NYDEC responded to a question from Chairman Jackson that the drum cell waste contains hazardous mixed waste, or so he believes. THIS STATEMENT IS INCORRECT, according to DOE. I have attached the relevant portion of the transcript.

DOE would like the Commissioners and staff to know that the drum cell waste contains only LLW. [The drum cell waste contains only WVDP waste].

Annette - I assume that your office will place a copy of this email or some form of correction in the appropriate briefing file(s).

**CC:** Dan Martin, Darlene Wright, EXM, Jack Parrott, ...

15  
COALITION ON WEST VALLEY NUCLEAR WASTES  
Sharp Street · East Concord, NY 14055 · (716) 941-3168

December 3, 1998

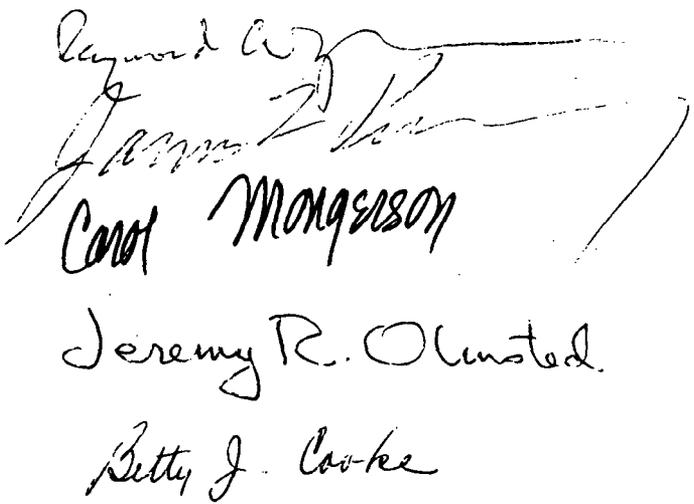
Shirley Ann Jackson, Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Chairman Jackson:

Enclosed is our statement on Commission Paper SECY-98-251.  
It is identical to the copy we faxed to NRC yesterday.

In our statement we raise a number of substantive issues and  
make a number of recommendations which we hope you and the other  
Commissioners will consider carefully. We are not planning to  
make an oral presentation at the January 12 briefing unless you  
think our presence there would be useful to provide further  
explanation or answer questions.

Sincerely,



Handwritten signatures of the Coalition members: Raymond C. Vaughan, James L. Pickering, Carol Mongerson, Jeremy R. Olmsted, and Betty J. Cooke.

Raymond C. Vaughan

James L. Pickering

Carol Mongerson

Jeremy R. Olmsted

Betty J. Cooke

STATEMENT OF POSITION ON COMMISSION PAPER SECY-98-251

submitted by

Coalition on West Valley Nuclear Wastes  
10734 Sharp Street, East Concord, N.Y. 14055  
December 2, 1998

Interest of the Coalition in seeing the rules of government spelled out in a clear and timely manner

1. The Coalition on West Valley Nuclear Wastes (Coalition) believes that the rules by which government conducts its business and regulates human activities should be plainly visible. Laws, regulations, and other legally binding rules on permitted and prohibited activities should be definite and should be reasonably accessible to the parties governed by them and to the public at large. The laws, regulations, and rules of a democratic society should not be implicit or covert because (among other reasons) this may raise suspicions of unfair dealing and collusion. Such suspicions may have no basis in fact, yet an implicit or covert relationship between governing and governed parties does not allow the outside verification that is expected in a democratic society. In short, rules that are clearly expressed and readily available are a matter of good government policy.

2. The Coalition likewise believes that the rules by which government conducts its business should be adopted before, not after, the governed activities occur. The U.S. Constitution provides a broad protection against laws that would retroactively declare an activity to be illegal, but there are other situations in today's complex world where rules (more often regulations than laws) may be created or finalized after the activity that would be governed by them has occurred. In rare circumstances this type of retroactive rulemaking may be unavoidable, but in most cases it is not justified and not conducive to good government. When an activity is eventually declared to be permissible in such cases, the decision can be construed as "rubber-stamping" or an undeliberated acceptance of the status quo. If and when an activity is eventually decided to be impermissible in such cases, the decision can be construed as an unfair regulatory burden on the governed party. Thus, rules that are adopted beforehand rather than retroactively should be the norm in a well-governed society.

3. Commission Paper SECY-98-251 contains serious defects with respect to the principles outlined above. The proposed rulemaking in SECY-98-251 does not create rules that are reasonably definite, nor does it create rules that are reasonably accessible to either the parties governed by them or the public at large. Of equal or greater consequence, SECY-98-251 sets forth proposed rules that would not be mandatory or finalized until after a substantial segment of the governed activities had occurred. For the reasons given above, this type of rulemaking is destructive of public trust and should not be undertaken except in rare (typically emergency) circumstances that do not apply here.

4. The Coalition has no authority to dictate public policy or enact legally binding rules. However, the Coalition believes that it has a right (in common with the rights of American citizens generally) to 1) know the rules under which government will conduct its business, especially within the Coalition's traditional sphere of interest; 2) participate in meetings, comment periods, and other opportunities provided by government for the purpose of helping to shape policies, enact laws, promulgate regulations, etc.; 3) insist on a certain degree of consistency and continuity in the rules and policies under which government conducts its business; and 4) insist on government adherence to established procedure (e.g., NEPA review) in those instances where government rules and policies move in new directions or deviate substantially from known precedent. The Coalition understands that the two last rights do not apply to the enactment of federal and state laws but do apply to the rules, regulations, and policies of administrative agencies of government.

5. In addition, the Coalition may have certain narrowly defined supplementary rights arising from the Stipulation of Compromise Settlement (Stipulation) signed with the U.S. Department of Energy (DOE) in 1987. See copy of Stipulation in Attachment 5 of SECY-98-251. Such additional rights of the Coalition, to the extent that they exist, would not normally impinge on the U.S. Nuclear Regulatory Commission (NRC) and other non-signatories to the Stipulation; however, there may be at least two areas in which they would pertain to NRC. First, §11 of the Stipulation requires DOE to "seek and abide by" a determination or prescription from NRC. DOE promptly sought such a determination from NRC, and NRC chose to respond with a somewhat unusual procedure that culminated in a clearcut set of requirements. Both DOE and the Coalition have interests relating to those requirements and their fulfillment, and the Coalition believes it has certain rights in that area. Second, DOE and the Coalition agreed in §4 of the Stipulation that the West Valley EIS process would begin no later than 1988 and "continue without undue delay and in an orderly fashion consistent with applicable law, the objectives of the West Valley Demonstration Project, available resources and mindful of the procedural processes (including public input) needed to complete the aforesaid Environmental Impact Statement." These words quoted from §4 may or may not enlarge the Coalition's rights under applicable law and regulations, but, in any case, the Coalition believes that NRC agreed to abide by those words when NRC joined the West Valley EIS without objection.

#### Scope of, and authority for, formal NRC involvement at West Valley

6. NRC has several roles at West Valley under the West Valley Demonstration Project Act. A limited part of NRC's role involves informal review and consultation under §2(c) of the Act, and NRC has engaged in this type of review and consultation at the West Valley site for many years. The Act also provides two or three formal (regulatory or standard-setting) roles for NRC at the West Valley site, as discussed below in more detail. In addition, the

NRC license for the site, issued under the Atomic Energy Act but currently "in abeyance" during DOE's West Valley Demonstration Project, represents another formal NRC role at the site. The Coalition is concerned that Commission Paper SECY-98-251 does not adequately recognize NRC's various formal roles. To some extent the necessary description and discussion is missing from SECY-98-251, and to some extent the discussion in SECY-98-251 improperly confuses and blurs NRC's formal roles at West Valley.

7. The West Valley Demonstration Project Act, §2(a)(5), gives NRC the authority to prescribe decontamination and decommissioning (D&D) requirements for the high-level waste tanks and certain other facilities at the site. Eighteen years after passage of the Act, NRC has not yet prescribed such requirements. SECY-98-251 puts forth an "approach" for setting such requirements but indicates that the formal prescription of the requirements would be deferred until some future date. The exact date is not specified, but, according to the procedural sequence in SECY-98-251, the formal prescription of D&D requirements would follow a formal site closure or waste management decision (EIS and Record of Decision) by DOE and New York State Energy Research & Development Authority (NYSERDA). The DOE/NYSERDA decision would be based in part on D&D criteria chosen by DOE and NYSERDA. NRC would then be faced with a choice of declaring that the DOE/NYSERDA choice of D&D criteria was acceptable (potentially construed as "rubber-stamping") or unacceptable (presumably creating a burdensome requirement for DOE and NYSERDA to re-do substantial parts of their planning, review, and decisionmaking processes). For reasons indicated above in paragraph 2, the Coalition considers this aspect of SECY-98-251 to be improper and unacceptable.

8. With regard to §2(a)(5) of the West Valley Demonstration Project Act, note that NRC is authorized to "prescribe" D&D requirements at West Valley. The Coalition is not convinced that NRC has legal authority to "postscribe" such requirements after substantial segments of the D&D task, including important elements of planning and decisionmaking, have already been carried out by DOE and NYSERDA.

9. The West Valley Demonstration Project Act, §2(a)(4), requires DOE to dispose of low level and transuranic waste from the Demonstration Project "in accordance with applicable licensing requirements." The Coalition has sought but not received an opinion from NRC on the licensing requirements that would be applicable (see letters from Vaughan to Greeves, dated July 27, 1997, and February 1, 1998, in M-32 file). The New York State Department of Environmental Conservation indicated in its comments dated September 1996 on the West Valley DEIS that New York's 6 NYCRR 382-383 regulations would be the licensing requirements applicable to any onsite low-level waste disposal at West Valley. It appears that either the federal 10 CFR 61 or state 6 NYCRR 382-383 regulations are the "applicable licensing requirements" for low-level waste disposal. The Coalition believes that 10 CFR 61 probably applies but recognizes that a careful review of the potentially applicable regulations and laws is needed before a clear determination is made. In any case, NRC needs to address

this issue fairly promptly, either in SECY-98-251 or another forum. If the issue of "applicable licensing requirements" for low-level and transuranic wastes is not addressed in SECY-98-251, NRC may run the risk of setting D&D requirements that conflict with or improperly constrain the "applicable licensing requirements" specified in §2(a)(4) of the West Valley Demonstration Project Act. The Coalition believes that SECY-98-251 should take a comprehensive view of the various NRC roles at West Valley. These NRC roles will apparently include either licensing under 10 CFR 61 or concluding that New York has clearcut Agreement-State authority to license under 6 NYCRR 382-383.

10. SECY-98-251 improperly seeks to redefine the word "decommissioning" in a way that confuses the distinct concepts of decommissioning and waste disposal. The attempted redefinition interferes with the separate statutory requirements for decommissioning and disposal in §§2(a)(5) and (4) of the West Valley Demonstration Project Act. It also obscures the distinct sets of regulatory precedent and expertise maintained by NRC in the areas of decommissioning and waste disposal. The attempted redefinition occurs in a single sentence on p. 3 of SECY-98-251 ("The term 'decommissioning criteria' is used broadly here to include criteria for potential waste disposal at the West Valley site") and is inappropriate in terms of 1) its content and 2) its deceptive brevity, especially its failure to discuss how it may constrain the exercise of judgment in fulfilling other statutory requirements. The Coalition believes that such redefinition should be eliminated from SECY-98-251.

11. The West Valley Demonstration Project Act, §6(5), gives NRC the authority to prescribe some concentration of transuranic elements (other than 10 nCi/g as specified in the Act) which will serve to define transuranic waste and, by inference, the dividing line between the categories of low-level and transuranic waste. This provision of the Act was involved in the 1986 lawsuit that the Coalition brought against DOE and also in the subsequent settlement between the two parties. See copy of the Stipulation which is included in Attachment 5 of SECY-98-251. Under §11 of the Stipulation, DOE agreed to "seek and abide by" a determination by NRC as to whether wastes containing between 10 and 100 nCi/g of transuranic elements would be considered transuranic wastes or low-level wastes for purposes of disposal at the West Valley site. DOE promptly sought such a determination, and NRC promptly responded by indicating that it would not make a blanket determination as to whether wastes containing between 10 and 100 nCi/g of transuranic elements were classified as transuranic or low level. Instead, NRC stated that disposal of such wastes would depend on whether certain requirements could be met. The initial statement of this NRC policy can be found in the last paragraph of the Knapp letter dated August 18, 1987 (see copy in Attachment 5 of SECY-98-251), but the fullest expression of the policy (i.e., of NRC's requirements) can be found in the 12-page NRC Task Plan entitled "Evaluation of West Valley TRU and Waste Classification Limits," written by Tim Johnson and presented at an April 27, 1988, meeting at West Valley attended by representatives from NRC, DOE, NYSERDA, and the Coalition. See M-32 file,

ACN 8806280243, for a copy of the Task Plan. See also the April 10, 1996, letter from Carl Paperiello of NRC which reaffirms NRC's commitment to the policy or position expressed in the Task Plan, Knapp letter, and four other related documents.

12. SECY-98-251 shows scant awareness of the policy created by NRC for wastes at West Valley that contain between 10 and 100 nCi/g of transuranic elements, as expressed initially in the Knapp letter and more fully in the Task Plan and related documents. The Coalition believes that SECY-98-251 must take a comprehensive view of the various NRC roles at West Valley, including the role that NRC established by setting requirements for wastes that contain between 10 and 100 nCi/g of transuranic elements. In particular, SECY-98-251 must avoid setting D&D requirements that conflict with the requirements set forth in the Task Plan.

13. The Coalition can recognize, as a very remote possibility, that NRC might try to repudiate the requirements expressed in the Task Plan inasmuch as the Task Plan and related documents were apparently never approved by the Commissioners of the NRC. The Coalition believes that any such repudiation would be unwise, especially in view of the following circumstances: 1) The Task Plan was NRC's self-chosen response to a 1987 DOE request that resulted from a court-approved settlement agreement between DOE and the Coalition. For NRC to change its mind at this late date would reopen a serious legal issue in an inappropriate way. 2) The Task Plan is not a low-level staff document; it has been reviewed, approved, and/or endorsed by relatively senior NRC personnel including Knapp, Bangart, Bernero, and Paperiello, and DOE counterparts such as Bixby and Osborne. 3) The Coalition has sought periodic updates from NRC on NRC policy and position relating to requirements expressed in the Task Plan. To date, NRC has not indicated any change in its policy or position in this area. For NRC to change its mind at this late date would reopen a serious legal issue in an inappropriate way.

14. It should be noted that the requirements expressed in the NRC Task Plan do not allow unlimited reliance on institutional controls to meet performance objectives. For example, one of the assumptions to be used in evaluating compliance with performance objectives is that institutional control over the disposal site is lost after 100 years (p. 6 of Task Plan). The Task Plan acknowledges that this and other, similar assumptions might be modified, but only with "rigorous justification" (p. 7). Such an approach is quite different from the non-rigorous approach of SECY-98-251.

15. SECY-98-251 introduces a waste category designated "incidental waste" which is unknown in the West Valley Demonstration Project Act, Stipulation, and other West-Valley-related documents. Regardless of any other disadvantages or advantages of this waste category, it cannot supersede waste categories for which clear requirements exist in the West Valley Demonstration Project Act, Stipulation, etc. SECY-98-251 should avoid any conflicts of this type.

16. The West Valley site originally operated under license CSF-1, issued in 1966 by the Atomic Energy Commission. Licensing authority subsequently passed to NRC, and NRC administered the proceedings under which license CSF-1 was put "in abeyance" on September 30, 1981, to allow the West Valley Demonstration Project to go forward. (More precisely, the technical specifications of the license were put in abeyance.) See Changes No. 31 and 32 to License CSF-1 in NRC Docket 50-201, and see especially §7(E) of the amended West Valley license itself. As described in these sources, NRC has authority under its regulations and the Atomic Energy Act to determine technical specifications and "such other provisions as the Commission finds necessary and proper" for resumption of the West Valley license by NYSERDA upon completion of the Demonstration Project. Note also that NRC has authority to set conditions for termination of this license under its 1997 Final Rule on Radiological Criteria for License Termination.

17. The Coalition believes that SECY-98-251 must take a comprehensive view of the various NRC roles at West Valley, including NRC's role in making discretionary decisions on the resumption, termination, or other resolution of the site license after completion of the West Valley Demonstration Project. NRC's role in reinstating the West Valley license is represented in SECY-98-251 as nondiscretionary and entirely dependent on NRC's choice of D&D criteria (footnote on p. 2 of SECY-98-251), but this misrepresents NRC's authority and responsibility for exercising judgment in licensing decisions. SECY-98-251 should examine the extent to which NRC's prescription of D&D requirements would constrain the exercise of judgment in future NRC decisions on licensing. Conversely, SECY-98-251 should examine the extent to which foreseeable licensing decisions (possibly involving 10 CFR 61, as noted above in paragraph 9) would constrain D&D options. A comprehensive view of NRC's roles and responsibilities is needed in SECY-98-251.

#### Uncertainties in relying on institutional controls

18. It is risky to make decisions today which rely on indefinite future maintenance of institutional controls to protect public health and safety. For this reason, NRC and other regulatory agencies have traditionally limited the extent to which institutional controls could be relied upon in meeting performance objectives.

19. For example, NRC stated in the 1997 Federal Register notice on its Final Rule on Radiological Criteria for License Termination, "Although the Commission believes that failure of active and passive institutional controls with the appropriate [legal and financial] provisions in place will be rare, it recognizes that it is not possible to preclude the failure of controls." The NRC Final Rule therefore sets a "cap" or "safety net" value (either 100 or 500 mrem/year, depending on circumstances) for the allowable public dose in the unlikely event that institutional controls fail.

20. Similarly, 10 CFR 61 limits the reliance that can be put on institutional controls for long-term performance of low-level waste disposal facilities. The general rule applied in 10 CFR 61 is that assumptions about institutional controls cannot be relied upon for more than 100 years. Beyond 100 years, the 10 CFR 61 performance objectives must be attainable even if institutional control of the site has been lost. The concepts and specific provisions of 10 CFR 61, including its 100-year limit on institutional-control reliance, underwent an extensive NEPA review and rulemaking process.

21. New York State's 6 NYCRR 382-383 low-level waste disposal regulations likewise prohibit reliance on institutional controls beyond 100 years. See, for example, pp. 2-3 of the New York State Department of Environmental Conservation's comments dated September 1996 on the West Valley DEIS for statements of rationale (quoted from both NRC and NYSDEC sources) for limiting the extent to which institutional controls can be relied upon in the federal 10 CFR 61 and state 6 NYCRR 382-383 regulations.

22. The purpose of limiting reliance on institutional controls is to protect public health and safety in the unlikely but possible event that institutional controls are lost. At the West Valley site it is difficult to estimate the probability of losing institutional controls, but it is clear that the consequences of such a loss would be high. SECY-98-251 hints at the problem on page 5 ("Because of long-term erosion and source-term release problems at the West valley site...") but a fuller discussion can be found in the August 1996 report prepared by NRC's contractor, Center for Nuclear Waste Regulatory Analyses, entitled "Review of Draft Environmental Impact Statement for Completion of the West Valley Demonstration Project and Closure or Long-Term Management of Facilities at the Western New York Nuclear Service Center," especially page 5-1. According to the conclusion stated there, "Risks presented in the DEIS under conditions of loss of institutional control are unacceptably high."

23. It should be noted that the types of institutional controls envisioned by DOE and NYSERDA at the West Valley site go far beyond minor custodial care, maintenance of deed restrictions, etc., that fall at one end of the institutional control spectrum. Institutional controls needed for long-term protection of the West Valley site would consist mainly of a massive and ongoing public-works project to arrest erosion in a naturally evolving, actively downcutting stream valley. The area that would need erosion protection is on the order of two square miles. Such institutional control falls at the high end of the category termed "active maintenance" in 10 CFR 61. Without massive institutional control of this type, various waste facilities at the West Valley site would be breached by erosion in less than 1000 years. See West Valley DEIS and other sources.

24. Part, but not all, of the risk involved in relying on institutional controls is the risk that future resources will be unavailable to carry out work that is recognizably needed at the site to prevent source-term releases, human intrusion, etc. In

such a scenario, resources might be unavailable due to severe global or national economic problems, or due to changing social priorities that made legislators unwilling to appropriate necessary funds, or due to unforeseen problems with a site-specific dedicated fund (e.g., insufficient funds due to initial underestimates of actual needs, or legislatively-approved "raiding" of a dedicated fund for other purposes). These are a few of the many possible ways in which future resources might be unavailable when needed.

25. Relatively good ways of assuring the availability of future resources can be identified and may alleviate some of the problems or risks inherent in long-term reliance on institutional controls. For example, a fully funded dedicated account administered by reliable trust officers would be very expensive but would provide a high degree of assurance that resources would be available when needed. Funding plans that rely on annual appropriations would provide far less assurance. Many other plans can also be envisioned that would provide varying degrees of assurance. Some discussion of financial surety mechanisms and requirements can be found, for example, in the Environmental Impact Statements for NRC's Final Rule on Radiological Criteria for License Termination and New York's 6 NYCRR 383 regulations. (However, in both cases, as noted above in paragraphs 19 and 21, NRC and New York State decided to use financial surety requirements in combination with, not in place of, limits on institutional-control reliance. It is important to recognize that even the best financial-surety mechanisms do not eliminate all risks of relying on institutional controls.)

26. In looking at questions of long-term institutional control at the West Valley site, it is important to distinguish three possible government entities on whom long-term responsibility might fall. From strongest to weakest in financial resources, the three distinct entities are the United States, State of New York, and NYSERDA. Under current law, the United States probably has the lowest probability of maintaining a long-term presence at the site. Note that NYSERDA is a separate entity from the State of New York. The extent to which New York is legally and financially responsible for NYSERDA's obligations needs to be checked and is an important aspect of long-term institutional control, especially if there is no long-term federal presence at the site.

#### Relationship of NEPA to SECY-98-251 and to NRC's various formal roles at West Valley

27. Discretionary decisions by federal agencies must generally be supported by review processes under the National Environmental Protection Act (NEPA). The extent or magnitude of a NEPA review (e.g., whether an EIS must be prepared) will generally depend on the magnitude, impact, and/or novelty of the decision. NEPA and its implementing regulations have various specific requirements that must be met.

28. SECY-98-251, as presented to the NRC Commissioners for ap-

proval, does not clearly identify what its approval would mean in terms of authorizing commitments of resources, constraining or foreclosing other discretionary decisions, etc. The Coalition believes that several aspects of SECY-98-251 need to be viewed as discretionary NRC decisions that have identifiable impacts and thus invoke the need for NEPA review. NEPA support for SECY-98-251 is currently lacking.

29. Approval of SECY-98-251 would relinquish NRC authority over the extent to which institutional controls can be relied upon at the West Valley site. This is one aspect of SECY-98-251 that clearly requires NEPA review but currently has no NEPA process to support it. As indicated above in paragraphs 18-21, authority over reliance on institutional control is an important element in the regulation of decommissioning and waste disposal. SECY-98-251 would relinquish such NRC authority at West Valley. See pages 4-6 of SECY-98-251, especially the last paragraph on page 6: "If DOE/NYSERDA's preferred alternative relies on institutional control, NRC may have to evaluate one of, or some combination of, the above alternatives, or some other alternative for the long-term control of the site." This approach surrenders NRC's authority over the question of long-term reliance on institutional controls. See also SECY-98-251, page 5: "it is possible that DOE/NYSERDA may choose a preferred decommissioning alternative in the EIS that requires extended reliance on institutional controls." NRC may contend that SECY-98-251 creates "proposed criteria" (p. 4) which limit reliance on institutional controls and are binding unless DOE/NYSERDA show "some justification" (p. 5), but such an approach does not retain NRC authority over the question of relying on institutional controls. The approach suffers in part from an indefinite, unenforceable standard of "justification," but, more importantly, such an approach improperly assumes that some type of "justification" could supersede a direct regulatory judgment on the acceptability of long-term reliance on institutional controls. The Coalition believes that the question of reliance on institutional controls is a very fundamental regulatory issue. It is a difficult issue, requiring good-faith efforts to look into the unknown future, and should be reviewed and decided by the regulatory agency itself. Any attempt by NRC to relinquish this authority would 1) be improper and 2) require, at the very least, NEPA review of the potentially enormous impacts on public health and safety.

30. NRC may believe that its participation as a cooperating agency in the DOE/NYSERDA West Valley EIS will provide NEPA support for any and all West-Valley-related decisions made by NRC. The Coalition disagrees. See some of our letters to NRC urging more attention to NEPA compliance (e.g., Vaughan to Greeves, February 1, 1998, in M-32 file). For proposed federal actions that may have a significant effect on the environment, NEPA typically requires a clear statement of the proposed action and a NEPA review specifically tied to the proposed action, including a Notice of Intent to prepare an EIS that directly relates to the proposed action, an opportunity for scoping comments focused on issues relevant to the proposed action, examination of impacts from the proposed action, and development of

alternatives for comparison to the proposed action. For its various West Valley roles, NRC has typically not reached the first step in this process (i.e., identifying or acknowledging its discretionary decisions as proposed actions that may have a significant effect on the environment), and, in the Coalition's opinion, must perform a number of steps to meet the requirements of NEPA. Among other things, it is important to note that the role of "cooperating agency" in a NEPA process is generally intended to provide expertise available from that agency, but not to support discretionary decisionmaking by that agency.

31. SECY-98-251 (page 6, recommendation 3) indicates NRC's intention to prescribe the decommissioning requirements at a later date. Approval of SECY-98-251 would be an improper de facto decision, unsupported by NEPA, in which NRC a) decided to delay or defer the prescription of D&D requirements and b) recognized that the delay or deferral would force DOE and NYSERDA to move forward and commit substantial resources to the development of D&D alternatives without a clear knowledge of their acceptability to NRC. This de facto decision by NRC would have no legally acceptable outcome. The only three possible outcomes are 1) that DOE and NYSERDA run a risk of committing substantial resources to the development of a D&D alternative that NRC will eventually find unacceptable, or 2) that DOE and NYSERDA run no such risk because NRC will abstain from exercising judgment in its eventual prescription of D&D requirements, or 3) that DOE and NYSERDA run no such risk because DOE and NYSERDA have covert knowledge of the D&D requirements that NRC will eventually prescribe. The Coalition believes that approval of SECY-98-251 would necessarily produce one of these three outcomes, that all three are illegal, and that the first two are clear violations of NEPA.

32. SECY-98-251 (page 3) claims that NRC staff "has been involved in the West Valley joint EIS process from the beginning." Depending on the meaning of "involved," this claim is either untrue or misleading. The Notice of Intent for the West Valley EIS dated December 27, 1988, shows very clearly that only DOE and NYSERDA were involved as decisionmakers. NRC may have offered scoping comments but was clearly not involved as a participating or cooperating agency at that time. Thus, among other NEPA deficiencies that NRC faces, there has never been an invitation or opportunity for the public to submit scoping comments directed toward NRC's decisionmaking role (prescription of site-specific D&D requirements) within the current West Valley EIS process. Many interested members of the public expected NRC's prescription of West Valley D&D requirements to be supported by NRC's national rulemaking on decommissioning criteria and its associated NEPA process. NRC's formal involvement in the West Valley EIS was relatively late (on or about April 25, 1991, according to Carl Paperiello letter dated April 10, 1996, in M-32 file) and has never been directed toward meeting NEPA requirements for discretionary decisionmaking by NRC.

33. DOE and NRC have moved into a decisionmaking relationship at West Valley which has the "functional interdependence" defined in 40 CFR 1501.5(a)(2), but the two agencies have not met the re-

quirements of §§1501.5(a) and (c). This is an ongoing NEPA problem which SECY-98-251 neither addresses nor resolves.

34. Approval of SECY-98-251 in its present form would, among other things, approve an approach which improperly ties disposal requirements to D&D requirements at West Valley, without acknowledging the need for NRC discretionary judgment, exercise of regulatory expertise, and NEPA review in both areas. See discussion above in paragraph 10. A comprehensive decisionmaking approach that includes both areas (disposal and D&D) is needed to avoid segmentation, but NRC should avoid any pretense that disposal requirements will be created as an automatic, undeliberated consequence of the D&D requirements. Instead, NRC needs to 1) acknowledge some degree of discretionary NRC judgment in the requirements for licensed disposal, 2) meet NEPA requirements with respect to such discretionary judgment, and 3) avoid deferring its judgment on disposal requirements lest DOE and NYSERDA move forward and commit substantial resources toward disposal alternatives that NRC eventually disallows.

35. Approval of SECY-98-251 in its present form would, among other things, approve an approach which improperly ties site license resolution to D&D requirements at West Valley, without acknowledging the need for NRC discretionary judgment, exercise of regulatory expertise, and NEPA review in both areas. See discussion above in paragraphs 16-17. A comprehensive decision-making approach that includes both areas (license resolution and D&D) is needed to avoid segmentation, but NRC should avoid any pretense that license resolution, possibly including technical specifications of a reinstated site license, will occur as an automatic, undeliberated consequence of the D&D requirements. Instead, NRC needs to 1) acknowledge NRC's discretionary judgment in license resolution issues, 2) meet NEPA requirements with respect to such discretionary judgment, and 3) avoid deferring its judgment on license resolution lest DOE and NYSERDA move forward and commit substantial resources toward alternatives that would be incompatible with eventual NRC requirements on license resolution.

36. The NRC West Valley briefing scheduled for January 12, 1999, is not a recognizable part of any NEPA process which has been set up to support NRC decisionmaking on West Valley requirements, nor is the briefing an acceptable substitute for an appropriate NEPA process.

#### **DOE-NRC relationship in relation to D&D requirements**

37. DOE is required by law to follow D&D requirements set by NRC for the West Valley site, but NRC alleges that DOE was somewhat responsible for the ongoing delay in setting D&D requirements. See letter from Carl Paperiello dated April 10, 1996, in M-32 file. It is improper for a regulated agency to cause delays by which it escapes or confounds legally mandated regulation. It is improper for NRC to condone this.

38. In its attempts to set D&D requirements for West Valley, NRC sometimes seems to be more concerned about near-term financial impacts on government agencies such as DOE than about long-term health and safety impacts that may affect the public. This is the wrong priority for a regulatory agency.

39. Under §2(a)(5) of the WVDP Act, DOE's role at West Valley cannot end until decommissioning has been carried out. NRC should be careful not to redefine "decommissioning" in a way that lowers or waters down the decommissioning requirement and lets DOE depart from the West Valley site earlier than would otherwise be possible. If this happened, it would tend to 1) increase long-term risk to the public because decommissioning was done less thoroughly and/or 2) shift more of the burden onto NYSERDA.

#### Difficulties in piecemeal application of 10 CFR 61

40. NRC's 10 CFR 61 regulations were adopted in their entirety as a comprehensive approach to low-level waste disposal. See, for example, the Malcolm Knapp letter dated August 18, 1987 (SECY-98-251, Attachment 5) which refers to "the EIS that provides the decision basis for 10 CFR Part 61." See also 10 CFR 61.7. The decision basis for 10 CFR 61, and the accompanying environmental review, assumed complete rather than piecemeal application of the regulations, subject only to exemptions that may be granted "in the public interest" under 10 CFR 61.6. Given the comprehensive approach of 10 CFR 61, it is unwise to assume that the protection afforded by 10 CFR 61 can be achieved equally well by applying segments or portions of 10 CFR 61 rather than the complete set of regulations.

41. Part of the comprehensive approach of 10 CFR 61 is its limitation on long-term reliance on institutional controls. Removal of this limitation will increase the risk and reduce the protection afforded by 10 CFR 61. See discussion above, especially paragraphs 18-26.

42. SECY-98-251 refers twice on page 5 to the performance objectives of 10 CFR 61 ("comparable to the performance objectives set out in 10 CFR Part 61" and "will meet the performance objectives of Part 61") but does not indicate the extent to which the remaining provisions of 10 CFR 61 would be rejected in these cases where the performance objectives would be applied.

43. Three of the performance objectives (§§61.40, 61.42, and 61.44) employ the words "site," "sited," "closure," and "closed" in phrases that may reasonably require reference to §61.2, Definitions, particularly the definition of "Site closure and stabilization." It is unclear whether SECY-98-251 intends a strict adherence to the 10 CFR 61 performance objectives but rejects relevant definitions given in 10 CFR 61.2.

44. One of the performance objectives (§61.44) employs the phrase "active maintenance," which may reasonably require reference to §61.2, Definitions, particularly the definition of "Active main-

tenance." It is unclear whether SECY-98-251 intends a strict adherence to the 10 CFR 61 performance objectives but rejects relevant definitions given in 10 CFR 61.2.

45. One of the performance objectives (§61.42) sets a requirement which includes the phrase "at any time after active institutional controls over the disposal site are removed." Given this phrase, it is unlikely that performance objective 10 CFR 61.42 can be met by some of the West Valley waste management areas under Alternative II, III, or IV. To the extent that the 10 CFR 61 performance objectives are applied at all, SECY-98-251 should clarify whether §61.42 would be applicable to Alternatives II, III, and IV, and, if so, whether the above-quoted phrase would be optional or mandatory.

46. One of the performance objectives (§61.44) sets a requirement which includes the phrase "so that only surveillance, monitoring, or minor custodial care are required." Given this phrase, it is unlikely that performance objective 10 CFR 61.44 can be met by some of the West Valley waste management areas under Alternative II, III, or IV. To the extent that the 10 CFR 61 performance objectives are applied at all, SECY-98-251 should clarify whether §61.44 would be applicable to Alternatives II, III, and IV, and, if so, whether the above-quoted phrase would be optional or mandatory.

#### Recommendations of the Coalition

47. Prescribe requirements that are definite. The requirements should be definite in order to 1) provide a clear standard for protection of public health and safety and 2) provide a clear and sufficient standard by which DOE and NYSERDA can make their decisions and carry out their other responsibilities at the West Valley site.

48. Prescribe requirements that are timely, i.e., prescribed beforehand, not after the fact.

49. Prescribe requirements that are comprehensive. In other words, SECY-98-251 should 1) explicitly recognize all four areas of discretionary NRC decisionmaking at West Valley (i.e., decommissioning requirements, applicable licensing for waste disposal, site license resolution, and requirements for wastes with TRU concentrations between 10 and 100 nCi/g); 2) address and resolve how NRC will proceed in all four areas, to the extent possible; and 3) avoid foreclosing or significantly constraining any discretionary NRC decisions that will not be deliberated or resolved in SECY-98-251.

50. Prescribe requirements that are compatible with the following approach:

- a) Recognize that the West Valley site is not suitable for long-term permanent storage or disposal of wastes. (Such a conclusion follows from NRC's own carefully deliberated prin-

principles and policies. See, for example, the West Valley DEIS, pages 3-155 to 3-161, and the August 1996 report prepared by NRC's contractor, Center for Nuclear Waste Regulatory Analyses, entitled "Review of Draft Environmental Impact Statement for Completion of the West Valley Demonstration Project and Closure or Long-Term Management of Facilities at the Western New York Nuclear Service Center.")

b) Move toward removal of wastes from the ground into containerized retrievable storage in a planned, orderly, but not necessarily immediate process. Cost should not be a major determining factor in the steps or timing of this process. The process should be guided mainly by 1) safety and health considerations, 2) the principle of preventing the spread of contamination, and 3) the principle of not making future steps in the process more difficult or expensive.

c) Move toward removal of wastes from the site in a planned, orderly, but not necessarily immediate process. Removal may eventually take wastes either to a more suitable location or to a process (not yet known or available) that can detoxify or safely isolate radionuclides. Cost should not be a major determining factor. Removal of wastes to a more suitable location should be guided mainly by health, safety, environmental, ethical, and political considerations. Removal of wastes to a detoxification or safe isolation process (if such becomes available) should be guided mainly by health, safety, environmental, and technical considerations.

d) To the extent that activities such as exhumation and transportation of wastes are deferred, require that a fully funded site-specific account be set up to provide for prompt availability of resources whenever they are needed in the future. Such an account should contain sufficient money to provide for contingencies and especially for exhumation, offsite transportation, and all other activities needed to reach the eventual goal of removal of wastes from the site. The creation and responsible maintenance of such an account is the only way to ensure that the overall process will be based on good judgment rather than misguided reluctance to spend money.

51. Do not relinquish NRC authority over the question of reliance on institutional controls.

52. Do not relinquish NRC authority over the question of reliance on institutional controls without full and appropriate NEPA review.

53. Comply with NEPA.

54. Apply the Final Rule on Radiological Criteria for License Termination to all portions of the West Valley site except the SDA. For facilities included in the West Valley Demonstration Project Act, use authority conferred by the West Valley Demonstration Project Act ("such requirements as the Commission may prescribe") to determine that the requirements of the Final Rule

will apply. NRC authority to apply the Final Rule to the remaining facilities (except the SDA) comes from the fact the site license which is currently in abeyance will apply to those facilities upon completion of the Demonstration Project.

55. Direct NRC staff to require that all projected future costs be realistic, good-faith estimates. Such projected future costs would be, for example, costs of long-term institutional control as envisioned in some of the alternatives in the West Valley DEIS, or costs of carrying out the approach outlined above in paragraph 50.

56. Direct NRC staff to require that all assumptions used in analyses and decisionmaking be prudent and protective.

57. Direct NRC staff to require that analyses be probability-weighted in cases where sensitivity analyses show that results are highly dependent on assumptions. Analyses in such cases should be based on cumulative distributions compiled from logic trees whose branches are assigned appropriate probabilities. In other words, instruct NRC staff not to allow binary choices between assumptions (or between input parameters) in cases where the results change abruptly by orders of magnitude. Standard practice at various other sites uses probability weighting; such should be required here. Thus, performance assessments at West Valley should be generally similar to those done at other sites which use distribution functions based on site-specific logic trees and probabilities. An example of the wrong approach (wherein predicted dose changes by many orders of magnitude based on assumptions which have less than 100% probability) is the "reengineered" value used in Table 2 of Attachment 3 of SECY-98-251 (see letters, Vaughan to Jackson, November 14, 1998, and Vaughan to Greeves, September 3, 1998).

58. Give greater priority to long-term health and safety than to near-term convenience of DOE and NYSERDA.

59. Stop being deferential to DOE.

60. Do not redefine "decommissioning" in a way that lowers or waters down the statutory requirement that DOE must meet before fulfilling its responsibilities and leaving the site.

**COALITION ON WEST VALLEY NUCLEAR WASTES**  
**Sharp Street · East Concord, NY 14055 · (716) 941-3168**

December 2, 1998

Bill Hill, Technical Assistant  
Office of the Secretary of the Commission  
Mailstop O-16C1  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

FAX: (301) 415-1672

Dear Mr. Hill:

On behalf of the Coalition's steering committee, I am faxing with this cover letter a copy of the Coalition's statement on SECY-98-251. The statement consists of 15 pages.

Is it advisable for one of us to appear in person at the NRC West Valley briefing on January 12? We are not necessarily inclined to do so due to the expense of the trip and the self-explanatory nature of our written statement. Nevertheless, we would appreciate some guidance from NRC on whether we should send a representative to the January 12 briefing. Specifically:

1) Will our enclosed written statement receive the same consideration as an oral presentation at the briefing? If not, we would like to request permission to make an oral presentation.

2) Do the Commissioners want an opportunity at the January 12 briefing to ask questions in person regarding our enclosed written statement? If so, please let me know. You can usually reach me during the day at my work number, (716) 853-7500, extension 7766.

If we do not hear back from you, we will assume that our written statement will suffice and that a personal appearance is not necessary. In either case, we will mail the original copy of the enclosed written statement, with a cover letter to Chairman Shirley Ann Jackson, within a few days.

Sincerely,



Raymond C. Vaughan

**STATEMENT OF POSITION ON COMMISSION PAPER SECY-98-251**

submitted by

Coalition on West Valley Nuclear Wastes  
10734 Sharp Street, East Concord, N.Y. 14055  
December 2, 1998

**Interest of the Coalition in seeing the rules of government spelled out in a clear and timely manner**

1. The Coalition on West Valley Nuclear Wastes (Coalition) believes that the rules by which government conducts its business and regulates human activities should be plainly visible. Laws, regulations, and other legally binding rules on permitted and prohibited activities should be definite and should be reasonably accessible to the parties governed by them and to the public at large. The laws, regulations, and rules of a democratic society should not be implicit or covert because (among other reasons) this may raise suspicions of unfair dealing and collusion. Such suspicions may have no basis in fact, yet an implicit or covert relationship between governing and governed parties does not allow the outside verification that is expected in a democratic society. In short, rules that are clearly expressed and readily available are a matter of good government policy.

2. The Coalition likewise believes that the rules by which government conducts its business should be adopted before, not after, the governed activities occur. The U.S. Constitution provides a broad protection against laws that would retroactively declare an activity to be illegal, but there are other situations in today's complex world where rules (more often regulations than laws) may be created or finalized after the activity that would be governed by them has occurred. In rare circumstances this type of retroactive rulemaking may be unavoidable, but in most cases it is not justified and not conducive to good government. When an activity is eventually declared to be permissible in such cases, the decision can be construed as "rubber-stamping" or an undeliberated acceptance of the status quo. If and when an activity is eventually decided to be impermissible in such cases, the decision can be construed as an unfair regulatory burden on the governed party. Thus, rules that are adopted beforehand rather than retroactively should be the norm in a well-governed society.

3. Commission Paper SECY-98-251 contains serious defects with respect to the principles outlined above. The proposed rulemaking in SECY-98-251 does not create rules that are reasonably definite, nor does it create rules that are reasonably accessible to either the parties governed by them or the public at large. Of equal or greater consequence, SECY-98-251 sets forth proposed rules that would not be mandatory or finalized until after a substantial segment of the governed activities had occurred. For the reasons given above, this type of rulemaking is destructive of public trust and should not be undertaken except in rare (typically emergency) circumstances that do not apply here.

4. The Coalition has no authority to dictate public policy or enact legally binding rules. However, the Coalition believes that it has a right (in common with the rights of American citizens generally) to 1) know the rules under which government will conduct its business, especially within the Coalition's traditional sphere of interest; 2) participate in meetings, comment periods, and other opportunities provided by government for the purpose of helping to shape policies, enact laws, promulgate regulations, etc.; 3) insist on a certain degree of consistency and continuity in the rules and policies under which government conducts its business; and 4) insist on government adherence to established procedure (e.g., NEPA review) in those instances where government rules and policies move in new directions or deviate substantially from known precedent. The Coalition understands that the two last rights do not apply to the enactment of federal and state laws but do apply to the rules, regulations, and policies of administrative agencies of government.

5. In addition, the Coalition may have certain narrowly defined supplementary rights arising from the Stipulation of Compromise Settlement (Stipulation) signed with the U.S. Department of Energy (DOE) in 1987. See copy of Stipulation in Attachment 5 of SECY-98-251. Such additional rights of the Coalition, to the extent that they exist, would not normally impinge on the U.S. Nuclear Regulatory Commission (NRC) and other non-signatories to the Stipulation; however, there may be at least two areas in which they would pertain to NRC. First, §11 of the Stipulation requires DOE to "seek and abide by" a determination or prescription from NRC. DOE promptly sought such a determination from NRC, and NRC chose to respond with a somewhat unusual procedure that culminated in a clearcut set of requirements. Both DOE and the Coalition have interests relating to those requirements and their fulfillment, and the Coalition believes it has certain rights in that area. Second, DOE and the Coalition agreed in §4 of the Stipulation that the West Valley EIS process would begin no later than 1988 and "continue without undue delay and in an orderly fashion consistent with applicable law, the objectives of the West Valley Demonstration Project, available resources and mindful of the procedural processes (including public input) needed to complete the aforesaid Environmental Impact Statement." These words quoted from §4 may or may not enlarge the Coalition's rights under applicable law and regulations, but, in any case, the Coalition believes that NRC agreed to abide by those words when NRC joined the West Valley EIS without objection.

#### Scope of, and authority for, formal NRC involvement at West Valley

6. NRC has several roles at West Valley under the West Valley Demonstration Project Act. A limited part of NRC's role involves informal review and consultation under §2(c) of the Act, and NRC has engaged in this type of review and consultation at the West Valley site for many years. The Act also provides two or three formal (regulatory or standard-setting) roles for NRC at the West Valley site, as discussed below in more detail. In addition, the

NRC license for the site, issued under the Atomic Energy Act but currently "in abeyance" during DOE's West Valley Demonstration Project, represents another formal NRC role at the site. The Coalition is concerned that Commission Paper SECY-98-251 does not adequately recognize NRC's various formal roles. To some extent the necessary description and discussion is missing from SECY-98-251, and to some extent the discussion in SECY-98-251 improperly confuses and blurs NRC's formal roles at West Valley.

7. The West Valley Demonstration Project Act, §2(a)(5), gives NRC the authority to prescribe decontamination and decommissioning (D&D) requirements for the high-level waste tanks and certain other facilities at the site. Eighteen years after passage of the Act, NRC has not yet prescribed such requirements. SECY-98-251 puts forth an "approach" for setting such requirements but indicates that the formal prescription of the requirements would be deferred until some future date. The exact date is not specified, but, according to the procedural sequence in SECY-98-251, the formal prescription of D&D requirements would follow a formal site closure or waste management decision (EIS and Record of Decision) by DOE and New York State Energy Research & Development Authority (NYSERDA). The DOE/NYSERDA decision would be based in part on D&D criteria chosen by DOE and NYSERDA. NRC would then be faced with a choice of declaring that the DOE/NYSERDA choice of D&D criteria was acceptable (potentially construed as "rubber-stamping") or unacceptable (presumably creating a burdensome requirement for DOE and NYSERDA to re-do substantial parts of their planning, review, and decisionmaking processes). For reasons indicated above in paragraph 2, the Coalition considers this aspect of SECY-98-251 to be improper and unacceptable.

8. With regard to §2(a)(5) of the West Valley Demonstration Project Act, note that NRC is authorized to "prescribe" D&D requirements at West Valley. The Coalition is not convinced that NRC has legal authority to "postscribe" such requirements after substantial segments of the D&D task, including important elements of planning and decisionmaking, have already been carried out by DOE and NYSERDA.

9. The West Valley Demonstration Project Act, §2(a)(4), requires DOE to dispose of low level and transuranic waste from the Demonstration Project "in accordance with applicable licensing requirements." The Coalition has sought but not received an opinion from NRC on the licensing requirements that would be applicable (see letters from Vaughan to Greeves, dated July 27, 1997, and February 1, 1998, in M-32 file). The New York State Department of Environmental Conservation indicated in its comments dated September 1996 on the West Valley DEIS that New York's 6 NYCRR 382-383 regulations would be the licensing requirements applicable to any onsite low-level waste disposal at West Valley. It appears that either the federal 10 CFR 61 or state 6 NYCRR 382-383 regulations are the "applicable licensing requirements" for low-level waste disposal. The Coalition believes that 10 CFR 61 probably applies but recognizes that a careful review of the potentially applicable regulations and laws is needed before a clear determination is made. In any case, NRC needs to address

this issue fairly promptly, either in SECY-98-251 or another forum. If the issue of "applicable licensing requirements" for low-level and transuranic wastes is not addressed in SECY-98-251, NRC may run the risk of setting D&D requirements that conflict with or improperly constrain the "applicable licensing requirements" specified in §2(a)(4) of the West Valley Demonstration Project Act. The Coalition believes that SECY-98-251 should take a comprehensive view of the various NRC roles at West Valley. These NRC roles will apparently include either licensing under 10 CFR 61 or concluding that New York has clearcut Agreement-State authority to license under 6 NYCRR 382-383.

10. SECY-98-251 improperly seeks to redefine the word "decommissioning" in a way that confuses the distinct concepts of decommissioning and waste disposal. The attempted redefinition interferes with the separate statutory requirements for decommissioning and disposal in §§2(a)(5) and (4) of the West Valley Demonstration Project Act. It also obscures the distinct sets of regulatory precedent and expertise maintained by NRC in the areas of decommissioning and waste disposal. The attempted redefinition occurs in a single sentence on p. 3 of SECY-98-251 ("The term 'decommissioning criteria' is used broadly here to include criteria for potential waste disposal at the West Valley site") and is inappropriate in terms of 1) its content and 2) its deceptive brevity, especially its failure to discuss how it may constrain the exercise of judgment in fulfilling other statutory requirements. The Coalition believes that such redefinition should be eliminated from SECY-98-251.

11. The West Valley Demonstration Project Act, §6(5), gives NRC the authority to prescribe some concentration of transuranic elements (other than 10 nCi/g as specified in the Act) which will serve to define transuranic waste and, by inference, the dividing line between the categories of low-level and transuranic waste. This provision of the Act was involved in the 1986 lawsuit that the Coalition brought against DOE and also in the subsequent settlement between the two parties. See copy of the Stipulation which is included in Attachment 5 of SECY-98-251. Under §11 of the Stipulation, DOE agreed to "seek and abide by" a determination by NRC as to whether wastes containing between 10 and 100 nCi/g of transuranic elements would be considered transuranic wastes or low-level wastes for purposes of disposal at the West Valley site. DOE promptly sought such a determination, and NRC promptly responded by indicating that it would not make a blanket determination as to whether wastes containing between 10 and 100 nCi/g of transuranic elements were classified as transuranic or low level. Instead, NRC stated that disposal of such wastes would depend on whether certain requirements could be met. The initial statement of this NRC policy can be found in the last paragraph of the Knapp letter dated August 18, 1987 (see copy in Attachment 5 of SECY-98-251), but the fullest expression of the policy (i.e., of NRC's requirements) can be found in the 12-page NRC Task Plan entitled "Evaluation of West Valley TRU and Waste Classification Limits," written by Tim Johnson and presented at an April 27, 1988, meeting at West Valley attended by representatives from NRC, DOE, NYSERDA, and the Coalition. See M-32 file,

ACN 8806280243, for a copy of the Task Plan. See also the April 10, 1996, letter from Carl Paperiello of NRC which reaffirms NRC's commitment to the policy or position expressed in the Task Plan, Knapp letter, and four other related documents.

12. SECY-98-251 shows scant awareness of the policy created by NRC for wastes at West Valley that contain between 10 and 100 nCi/g of transuranic elements, as expressed initially in the Knapp letter and more fully in the Task Plan and related documents. The Coalition believes that SECY-98-251 must take a comprehensive view of the various NRC roles at West Valley, including the role that NRC established by setting requirements for wastes that contain between 10 and 100 nCi/g of transuranic elements. In particular, SECY-98-251 must avoid setting D&D requirements that conflict with the requirements set forth in the Task Plan.

13. The Coalition can recognize, as a very remote possibility, that NRC might try to repudiate the requirements expressed in the Task Plan inasmuch as the Task Plan and related documents were apparently never approved by the Commissioners of the NRC. The Coalition believes that any such repudiation would be unwise, especially in view of the following circumstances: 1) The Task Plan was NRC's self-chosen response to a 1987 DOE request that resulted from a court-approved settlement agreement between DOE and the Coalition. For NRC to change its mind at this late date would reopen a serious legal issue in an inappropriate way. 2) The Task Plan is not a low-level staff document; it has been reviewed, approved, and/or endorsed by relatively senior NRC personnel including Knapp, Bangart, Bernero, and Paperiello, and DOE counterparts such as Bixby and Osborne. 3) The Coalition has sought periodic updates from NRC on NRC policy and position relating to requirements expressed in the Task Plan. To date, NRC has not indicated any change in its policy or position in this area. For NRC to change its mind at this late date would reopen a serious legal issue in an inappropriate way.

14. It should be noted that the requirements expressed in the NRC Task Plan do not allow unlimited reliance on institutional controls to meet performance objectives. For example, one of the assumptions to be used in evaluating compliance with performance objectives is that institutional control over the disposal site is lost after 100 years (p. 6 of Task Plan). The Task Plan acknowledges that this and other, similar assumptions might be modified, but only with "rigorous justification" (p. 7). Such an approach is quite different from the non-rigorous approach of SECY-98-251.

15. SECY-98-251 introduces a waste category designated "incidental waste" which is unknown in the West Valley Demonstration Project Act, Stipulation, and other West-Valley-related documents. Regardless of any other disadvantages or advantages of this waste category, it cannot supersede waste categories for which clear requirements exist in the West Valley Demonstration Project Act, Stipulation, etc. SECY-98-251 should avoid any conflicts of this type.

16. The West Valley site originally operated under license CSF-1, issued in 1966 by the Atomic Energy Commission. Licensing authority subsequently passed to NRC, and NRC administered the proceedings under which license CSF-1 was put "in abeyance" on September 30, 1981, to allow the West Valley Demonstration Project to go forward. (More precisely, the technical specifications of the license were put in abeyance.) See Changes No. 31 and 32 to License CSF-1 in NRC Docket 50-201, and see especially §7(E) of the amended West Valley license itself. As described in these sources, NRC has authority under its regulations and the Atomic Energy Act to determine technical specifications and "such other provisions as the Commission finds necessary and proper" for resumption of the West Valley license by NYSERDA upon completion of the Demonstration Project. Note also that NRC has authority to set conditions for termination of this license under its 1997 Final Rule on Radiological Criteria for License Termination.

17. The Coalition believes that SECY-98-251 must take a comprehensive view of the various NRC roles at West Valley, including NRC's role in making discretionary decisions on the resumption, termination, or other resolution of the site license after completion of the West Valley Demonstration Project. NRC's role in reinstating the West Valley license is represented in SECY-98-251 as nondiscretionary and entirely dependent on NRC's choice of D&D criteria (footnote on p. 2 of SECY-98-251), but this misrepresents NRC's authority and responsibility for exercising judgment in licensing decisions. SECY-98-251 should examine the extent to which NRC's prescription of D&D requirements would constrain the exercise of judgment in future NRC decisions on licensing. Conversely, SECY-98-251 should examine the extent to which foreseeable licensing decisions (possibly involving 10 CFR 61, as noted above in paragraph 9) would constrain D&D options. A comprehensive view of NRC's roles and responsibilities is needed in SECY-98-251.

#### Uncertainties in relying on institutional controls

18. It is risky to make decisions today which rely on indefinite future maintenance of institutional controls to protect public health and safety. For this reason, NRC and other regulatory agencies have traditionally limited the extent to which institutional controls could be relied upon in meeting performance objectives.

19. For example, NRC stated in the 1997 Federal Register notice on its Final Rule on Radiological Criteria for License Termination, "Although the Commission believes that failure of active and passive institutional controls with the appropriate [legal and financial] provisions in place will be rare, it recognizes that it is not possible to preclude the failure of controls." The NRC Final Rule therefore sets a "cap" or "safety net" value (either 100 or 500 mrem/year, depending on circumstances) for the allowable public dose in the unlikely event that institutional controls fail.

20. Similarly, 10 CFR 61 limits the reliance that can be put on institutional controls for long-term performance of low-level waste disposal facilities. The general rule applied in 10 CFR 61 is that assumptions about institutional controls cannot be relied upon for more than 100 years. Beyond 100 years, the 10 CFR 61 performance objectives must be attainable even if institutional control of the site has been lost. The concepts and specific provisions of 10 CFR 61, including its 100-year limit on institutional-control reliance, underwent an extensive NEPA review and rulemaking process.

21. New York State's 6 NYCRR 382-383 low-level waste disposal regulations likewise prohibit reliance on institutional controls beyond 100 years. See, for example, pp. 2-3 of the New York State Department of Environmental Conservation's comments dated September 1996 on the West Valley DEIS for statements of rationale (quoted from both NRC and NYSDEC sources) for limiting the extent to which institutional controls can be relied upon in the federal 10 CFR 61 and state 6 NYCRR 382-383 regulations.

22. The purpose of limiting reliance on institutional controls is to protect public health and safety in the unlikely but possible event that institutional controls are lost. At the West Valley site it is difficult to estimate the probability of losing institutional controls, but it is clear that the consequences of such a loss would be high. SECY-98-251 hints at the problem on page 5 ("Because of long-term erosion and source-term release problems at the West valley site...") but a fuller discussion can be found in the August 1996 report prepared by NRC's contractor, Center for Nuclear Waste Regulatory Analyses, entitled "Review of Draft Environmental Impact Statement for Completion of the West Valley Demonstration Project and Closure or Long-Term Management of Facilities at the Western New York Nuclear Service Center," especially page 5-1. According to the conclusion stated there, "Risks presented in the DEIS under conditions of loss of institutional control are unacceptably high."

23. It should be noted that the types of institutional controls envisioned by DOE and NYSEDA at the West Valley site go far beyond minor custodial care, maintenance of deed restrictions, etc., that fall at one end of the institutional control spectrum. Institutional controls needed for long-term protection of the West Valley site would consist mainly of a massive and ongoing public-works project to arrest erosion in a naturally evolving, actively downcutting stream valley. The area that would need erosion protection is on the order of two square miles. Such institutional control falls at the high end of the category termed "active maintenance" in 10 CFR 61. Without massive institutional control of this type, various waste facilities at the West Valley site would be breached by erosion in less than 1000 years. See West Valley DEIS and other sources.

24. Part, but not all, of the risk involved in relying on institutional controls is the risk that future resources will be unavailable to carry out work that is recognizably needed at the site to prevent source-term releases, human intrusion, etc. In

such a scenario, resources might be unavailable due to severe global or national economic problems, or due to changing social priorities that made legislators unwilling to appropriate necessary funds, or due to unforeseen problems with a site-specific dedicated fund (e.g., insufficient funds due to initial underestimates of actual needs, or legislatively-approved "raiding" of a dedicated fund for other purposes). These are a few of the many possible ways in which future resources might be unavailable when needed.

25. Relatively good ways of assuring the availability of future resources can be identified and may alleviate some of the problems or risks inherent in long-term reliance on institutional controls. For example, a fully funded dedicated account administered by reliable trust officers would be very expensive but would provide a high degree of assurance that resources would be available when needed. Funding plans that rely on annual appropriations would provide far less assurance. Many other plans can also be envisioned that would provide varying degrees of assurance. Some discussion of financial surety mechanisms and requirements can be found, for example, in the Environmental Impact Statements for NRC's Final Rule on Radiological Criteria for License Termination and New York's 6 NYCRR 383 regulations. (However, in both cases, as noted above in paragraphs 19 and 21, NRC and New York State decided to use financial surety requirements in combination with, not in place of, limits on institutional-control reliance. It is important to recognize that even the best financial-surety mechanisms do not eliminate all risks of relying on institutional controls.)

26. In looking at questions of long-term institutional control at the West Valley site, it is important to distinguish three possible government entities on whom long-term responsibility might fall. From strongest to weakest in financial resources, the three distinct entities are the United States, State of New York, and NYSERDA. Under current law, the United States probably has the lowest probability of maintaining a long-term presence at the site. Note that NYSERDA is a separate entity from the State of New York. The extent to which New York is legally and financially responsible for NYSERDA's obligations needs to be checked and is an important aspect of long-term institutional control, especially if there is no long-term federal presence at the site.

#### Relationship of NEPA to SECY-98-251 and to NRC's various formal roles at West Valley

27. Discretionary decisions by federal agencies must generally be supported by review processes under the National Environmental Protection Act (NEPA). The extent or magnitude of a NEPA review (e.g., whether an EIS must be prepared) will generally depend on the magnitude, impact, and/or novelty of the decision. NEPA and its implementing regulations have various specific requirements that must be met.

28. SECY-98-251, as presented to the NRC Commissioners for ap-

proval, does not clearly identify what its approval would mean in terms of authorizing commitments of resources, constraining or foreclosing other discretionary decisions, etc. The Coalition believes that several aspects of SECY-98-251 need to be viewed as discretionary NRC decisions that have identifiable impacts and thus invoke the need for NEPA review. NEPA support for SECY-98-251 is currently lacking.

29. Approval of SECY-98-251 would relinquish NRC authority over the extent to which institutional controls can be relied upon at the West Valley site. This is one aspect of SECY-98-251 that clearly requires NEPA review but currently has no NEPA process to support it. As indicated above in paragraphs 18-21, authority over reliance on institutional control is an important element in the regulation of decommissioning and waste disposal. SECY-98-251 would relinquish such NRC authority at West Valley. See pages 4-6 of SECY-98-251, especially the last paragraph on page 6: "If DOE/NYSERDA's preferred alternative relies on institutional control, NRC may have to evaluate one of, or some combination of, the above alternatives, or some other alternative for the long-term control of the site." This approach surrenders NRC's authority over the question of long-term reliance on institutional controls. See also SECY-98-251, page 5: "it is possible that DOE/NYSERDA may choose a preferred decommissioning alternative in the EIS that requires extended reliance on institutional controls." NRC may contend that SECY-98-251 creates "proposed criteria" (p. 4) which limit reliance on institutional controls and are binding unless DOE/NYSERDA show "some justification" (p. 5), but such an approach does not retain NRC authority over the question of relying on institutional controls. The approach suffers in part from an indefinite, unenforceable standard of "justification," but, more importantly, such an approach improperly assumes that some type of "justification" could supersede a direct regulatory judgment on the acceptability of long-term reliance on institutional controls. The Coalition believes that the question of reliance on institutional controls is a very fundamental regulatory issue. It is a difficult issue, requiring good-faith efforts to look into the unknown future, and should be reviewed and decided by the regulatory agency itself. Any attempt by NRC to relinquish this authority would 1) be improper and 2) require, at the very least, NEPA review of the potentially enormous impacts on public health and safety.

30. NRC may believe that its participation as a cooperating agency in the DOE/NYSERDA West Valley EIS will provide NEPA support for any and all West-Valley-related decisions made by NRC. The Coalition disagrees. See some of our letters to NRC urging more attention to NEPA compliance (e.g., Vaughan to Greeves, February 1, 1998, in M-32 file). For proposed federal actions that may have a significant effect on the environment, NEPA typically requires a clear statement of the proposed action and a NEPA review specifically tied to the proposed action, including a Notice of Intent to prepare an EIS that directly relates to the proposed action, an opportunity for scoping comments focused on issues relevant to the proposed action, examination of impacts from the proposed action, and development of

alternatives for comparison to the proposed action. For its various West Valley roles, NRC has typically not reached the first step in this process (i.e., identifying or acknowledging its discretionary decisions as proposed actions that may have a significant effect on the environment), and, in the Coalition's opinion, must perform a number of steps to meet the requirements of NEPA. Among other things, it is important to note that the role of "cooperating agency" in a NEPA process is generally intended to provide expertise available from that agency, but not to support discretionary decisionmaking by that agency.

31. SECY-98-251 (page 6, recommendation 3) indicates NRC's intention to prescribe the decommissioning requirements at a later date. Approval of SECY-98-251 would be an improper de facto decision, unsupported by NEPA, in which NRC a) decided to delay or defer the prescription of D&D requirements and b) recognized that the delay or deferral would force DOE and NYSERDA to move forward and commit substantial resources to the development of D&D alternatives without a clear knowledge of their acceptability to NRC. This de facto decision by NRC would have no legally acceptable outcome. The only three possible outcomes are 1) that DOE and NYSERDA run a risk of committing substantial resources to the development of a D&D alternative that NRC will eventually find unacceptable, or 2) that DOE and NYSERDA run no such risk because NRC will abstain from exercising judgment in its eventual prescription of D&D requirements, or 3) that DOE and NYSERDA run no such risk because DOE and NYSERDA have covert knowledge of the D&D requirements that NRC will eventually prescribe. The Coalition believes that approval of SECY-98-251 would necessarily produce one of these three outcomes, that all three are illegal, and that the first two are clear violations of NEPA.

32. SECY-98-251 (page 3) claims that NRC staff "has been involved in the West Valley joint EIS process from the beginning." Depending on the meaning of "involved," this claim is either untrue or misleading. The Notice of Intent for the West Valley EIS dated December 27, 1988, shows very clearly that only DOE and NYSERDA were involved as decisionmakers. NRC may have offered scoping comments but was clearly not involved as a participating or cooperating agency at that time. Thus, among other NEPA deficiencies that NRC faces, there has never been an invitation or opportunity for the public to submit scoping comments directed toward NRC's decisionmaking role (prescription of site-specific D&D requirements) within the current West Valley EIS process. Many interested members of the public expected NRC's prescription of West Valley D&D requirements to be supported by NRC's national rulemaking on decommissioning criteria and its associated NEPA process. NRC's formal involvement in the West Valley EIS was relatively late (on or about April 25, 1991, according to Carl Paperiello letter dated April 10, 1996, in M-32 file) and has never been directed toward meeting NEPA requirements for discretionary decisionmaking by NRC.

33. DOE and NRC have moved into a decisionmaking relationship at West Valley which has the "functional interdependence" defined in 40 CFR 1501.5(a)(2), but the two agencies have not met the re-

quirements of §§1501.5(a) and (c). This is an ongoing NEPA problem which SECY-98-251 neither addresses nor resolves.

34. Approval of SECY-98-251 in its present form would, among other things, approve an approach which improperly ties disposal requirements to D&D requirements at West Valley, without acknowledging the need for NRC discretionary judgment, exercise of regulatory expertise, and NEPA review in both areas. See discussion above in paragraph 10. A comprehensive decisionmaking approach that includes both areas (disposal and D&D) is needed to avoid segmentation, but NRC should avoid any pretense that disposal requirements will be created as an automatic, undeliberated consequence of the D&D requirements. Instead, NRC needs to 1) acknowledge some degree of discretionary NRC judgment in the requirements for licensed disposal, 2) meet NEPA requirements with respect to such discretionary judgment, and 3) avoid deferring its judgment on disposal requirements lest DOE and NYSERDA move forward and commit substantial resources toward disposal alternatives that NRC eventually disallows.

35. Approval of SECY-98-251 in its present form would, among other things, approve an approach which improperly ties site license resolution to D&D requirements at West Valley, without acknowledging the need for NRC discretionary judgment, exercise of regulatory expertise, and NEPA review in both areas. See discussion above in paragraphs 16-17. A comprehensive decisionmaking approach that includes both areas (license resolution and D&D) is needed to avoid segmentation, but NRC should avoid any pretense that license resolution, possibly including technical specifications of a reinstated site license, will occur as an automatic, undeliberated consequence of the D&D requirements. Instead, NRC needs to 1) acknowledge NRC's discretionary judgment in license resolution issues, 2) meet NEPA requirements with respect to such discretionary judgment, and 3) avoid deferring its judgment on license resolution lest DOE and NYSERDA move forward and commit substantial resources toward alternatives that would be incompatible with eventual NRC requirements on license resolution.

36. The NRC West Valley briefing scheduled for January 12, 1999, is not a recognizable part of any NEPA process which has been set up to support NRC decisionmaking on West Valley requirements, nor is the briefing an acceptable substitute for an appropriate NEPA process.

#### DOE-NRC relationship in relation to D&D requirements

37. DOE is required by law to follow D&D requirements set by NRC for the West Valley site, but NRC alleges that DOE was somewhat responsible for the ongoing delay in setting D&D requirements. See letter from Carl Paperiello dated April 10, 1996, in M-32 file. It is improper for a regulated agency to cause delays by which it escapes or confounds legally mandated regulation. It is improper for NRC to condone this.

38. In its attempts to set D&D requirements for West Valley, NRC sometimes seems to be more concerned about near-term financial impacts on government agencies such as DOE than about long-term health and safety impacts that may affect the public. This is the wrong priority for a regulatory agency.

39. Under §2(a)(5) of the WVDP Act, DOE's role at West Valley cannot end until decommissioning has been carried out. NRC should be careful not to redefine "decommissioning" in a way that lowers or waters down the decommissioning requirement and lets DOE depart from the West Valley site earlier than would otherwise be possible. If this happened, it would tend to 1) increase long-term risk to the public because decommissioning was done less thoroughly and/or 2) shift more of the burden onto NYSERDA.

#### Difficulties in piecemeal application of 10 CFR 61

40. NRC's 10 CFR 61 regulations were adopted in their entirety as a comprehensive approach to low-level waste disposal. See, for example, the Malcolm Knapp letter dated August 18, 1987 (SECY-98-251, Attachment 5) which refers to "the EIS that provides the decision basis for 10 CFR Part 61." See also 10 CFR 61.7. The decision basis for 10 CFR 61, and the accompanying environmental review, assumed complete rather than piecemeal application of the regulations, subject only to exemptions that may be granted "in the public interest" under 10 CFR 61.6. Given the comprehensive approach of 10 CFR 61, it is unwise to assume that the protection afforded by 10 CFR 61 can be achieved equally well by applying segments or portions of 10 CFR 61 rather than the complete set of regulations.

41. Part of the comprehensive approach of 10 CFR 61 is its limitation on long-term reliance on institutional controls. Removal of this limitation will increase the risk and reduce the protection afforded by 10 CFR 61. See discussion above, especially paragraphs 18-26.

42. SECY-98-251 refers twice on page 5 to the performance objectives of 10 CFR 61 ("comparable to the performance objectives set out in 10 CFR Part 61" and "will meet the performance objectives of Part 61") but does not indicate the extent to which the remaining provisions of 10 CFR 61 would be rejected in these cases where the performance objectives would be applied.

43. Three of the performance objectives (§§61.40, 61.42, and 61.44) employ the words "site," "sited," "closure," and "closed" in phrases that may reasonably require reference to §61.2, Definitions, particularly the definition of "Site closure and stabilization." It is unclear whether SECY-98-251 intends a strict adherence to the 10 CFR 61 performance objectives but rejects relevant definitions given in 10 CFR 61.2.

44. One of the performance objectives (§61.44) employs the phrase "active maintenance," which may reasonably require reference to §61.2, Definitions, particularly the definition of "Active main-

tenance." It is unclear whether SECY-98-251 intends a strict adherence to the 10 CFR 61 performance objectives but rejects relevant definitions given in 10 CFR 61.2.

45. One of the performance objectives (§61.42) sets a requirement which includes the phrase "at any time after active institutional controls over the disposal site are removed." Given this phrase, it is unlikely that performance objective 10 CFR 61.42 can be met by some of the West Valley waste management areas under Alternative II, III, or IV. To the extent that the 10 CFR 61 performance objectives are applied at all, SECY-98-251 should clarify whether §61.42 would be applicable to Alternatives II, III, and IV, and, if so, whether the above-quoted phrase would be optional or mandatory.

46. One of the performance objectives (§61.44) sets a requirement which includes the phrase "so that only surveillance, monitoring, or minor custodial care are required." Given this phrase, it is unlikely that performance objective 10 CFR 61.44 can be met by some of the West Valley waste management areas under Alternative II, III, or IV. To the extent that the 10 CFR 61 performance objectives are applied at all, SECY-98-251 should clarify whether §61.44 would be applicable to Alternatives II, III, and IV, and, if so, whether the above-quoted phrase would be optional or mandatory.

#### Recommendations of the Coalition

47. Prescribe requirements that are definite. The requirements should be definite in order to 1) provide a clear standard for protection of public health and safety and 2) provide a clear and sufficient standard by which DOE and NYSERDA can make their decisions and carry out their other responsibilities at the West Valley site.

48. Prescribe requirements that are timely, i.e., prescribed beforehand, not after the fact.

49. Prescribe requirements that are comprehensive. In other words, SECY-98-251 should 1) explicitly recognize all four areas of discretionary NRC decisionmaking at West Valley (i.e., decommissioning requirements, applicable licensing for waste disposal, site license resolution, and requirements for wastes with TRU concentrations between 10 and 100 nCi/g); 2) address and resolve how NRC will proceed in all four areas, to the extent possible; and 3) avoid foreclosing or significantly constraining any discretionary NRC decisions that will not be deliberated or resolved in SECY-98-251.

50. Prescribe requirements that are compatible with the following approach:

- a) Recognize that the West Valley site is not suitable for long-term permanent storage or disposal of wastes. (Such a conclusion follows from NRC's own carefully deliberated prin-

ciples and policies. See, for example, the West Valley DEIS, pages 3-155 to 3-161, and the August 1996 report prepared by NRC's contractor, Center for Nuclear Waste Regulatory Analyses, entitled "Review of Draft Environmental Impact Statement for Completion of the West Valley Demonstration Project and Closure or Long-Term Management of Facilities at the Western New York Nuclear Service Center.")

b) Move toward removal of wastes from the ground into containerized retrievable storage in a planned, orderly, but not necessarily immediate process. Cost should not be a major determining factor in the steps or timing of this process. The process should be guided mainly by 1) safety and health considerations, 2) the principle of preventing the spread of contamination, and 3) the principle of not making future steps in the process more difficult or expensive.

c) Move toward removal of wastes from the site in a planned, orderly, but not necessarily immediate process. Removal may eventually take wastes either to a more suitable location or to a process (not yet known or available) that can detoxify or safely isolate radionuclides. Cost should not be a major determining factor. Removal of wastes to a more suitable location should be guided mainly by health, safety, environmental, ethical, and political considerations. Removal of wastes to a detoxification or safe isolation process (if such becomes available) should be guided mainly by health, safety, environmental, and technical considerations.

d) To the extent that activities such as exhumation and transportation of wastes are deferred, require that a fully funded site-specific account be set up to provide for prompt availability of resources whenever they are needed in the future. Such an account should contain sufficient money to provide for contingencies and especially for exhumation, offsite transportation, and all other activities needed to reach the eventual goal of removal of wastes from the site. The creation and responsible maintenance of such an account is the only way to ensure that the overall process will be based on good judgment rather than misguided reluctance to spend money.

51. Do not relinquish NRC authority over the question of reliance on institutional controls.

52. Do not relinquish NRC authority over the question of reliance on institutional controls without full and appropriate NEPA review.

53. Comply with NEPA.

54. Apply the Final Rule on Radiological Criteria for License Termination to all portions of the West Valley site except the SDA. For facilities included in the West Valley Demonstration Project Act, use authority conferred by the West Valley Demonstration Project Act ("such requirements as the Commission may prescribe") to determine that the requirements of the Final Rule

will apply. NRC authority to apply the Final Rule to the remaining facilities (except the SDA) comes from the fact the site license which is currently in abeyance will apply to those facilities upon completion of the Demonstration Project.

55. Direct NRC staff to require that all projected future costs be realistic, good-faith estimates. Such projected future costs would be, for example, costs of long-term institutional control as envisioned in some of the alternatives in the West Valley DEIS, or costs of carrying out the approach outlined above in paragraph 50.

56. Direct NRC staff to require that all assumptions used in analyses and decisionmaking be prudent and protective.

57. Direct NRC staff to require that analyses be probability-weighted in cases where sensitivity analyses show that results are highly dependent on assumptions. Analyses in such cases should be based on cumulative distributions compiled from logic trees whose branches are assigned appropriate probabilities. In other words, instruct NRC staff not to allow binary choices between assumptions (or between input parameters) in cases where the results change abruptly by orders of magnitude. Standard practice at various other sites uses probability weighting; such should be required here. Thus, performance assessments at West Valley should be generally similar to those done at other sites which use distribution functions based on site-specific logic trees and probabilities. An example of the wrong approach (wherein predicted dose changes by many orders of magnitude based on assumptions which have less than 100% probability) is the "reengineered" value used in Table 2 of Attachment 3 of SECY-98-251 (see letters, Vaughan to Jackson, November 14, 1998, and Vaughan to Greeves, September 3, 1998).

58. Give greater priority to long-term health and safety than to near-term convenience of DOE and NYSERDA.

59. Stop being deferential to DOE.

60. Do not redefine "decommissioning" in a way that lowers or waters down the statutory requirement that DOE must meet before fulfilling its responsibilities and leaving the site.

135 East Main Street  
Hamburg, N.Y. 14075  
November 14, 1998

Shirley Ann Jackson, Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Chairman Jackson:

You and the other Commissioners have been asked to approve an approach to West Valley decommissioning criteria as set forth in SECY-98-251.

I request that you and the other Commissioners defer any such approval until you consider and resolve my assertions (see below) that certain parts of the SECY-98-251 material provided to you by NRC staff are deceptive and misleading. In some cases the deceptiveness arises from a failure to mention or focus on relevant facts and linkages.

I am a member of the West Valley Citizen Task Force and a signatory to its Final Report which is part of the SECY-98-251 material provided to you by NRC staff. I am also a member of the steering committee of the Coalition on West Valley Nuclear Wastes and a signatory of the Stipulation of Compromise Settlement which is part of the SECY-98-251 material provided to you by NRC staff. Although I mention these affiliations to help identify myself, I should note that the assertions made below are mine; they have not yet been reviewed or approved by either organization.

Based on my quick review of the SECY-98-251 material over the past 24 hours, I see a number of instances of misleading or omitted material which I believe will impair the Commissioners' ability to make an informed decision on the requested approval:

**1. The approach which the Commissioners are asked to approve in SECY-98-251 subverts clearcut decisionmaking and appears to evade the intent of the West Valley Demonstration Project Act and NEPA.**

Those involved in fields such as law, regulation, and planning recognize the value of clearcut decisionmaking. Harry Truman's sign, "The Buck Stops Here," is perhaps the best-known endorsement of this important principle. The legislators who wrote and approved the West Valley Demonstration Project Act and National Environmental Policy Act (NEPA) likewise saw the value of clearcut decisionmaking. But the "approach" which the Commissioners are asked to approve in SECY-98-251 is entirely contrary to this principle. It intertwines NRC decisionmaking with DOE/NYSERDA decisionmaking in a way that encourages all three agencies to drift toward decommissioning activities that lack clear regulation and review, contrary to both the West Valley Demonstration Project Act and NEPA.

11/16..To EDO for <sup>EDO's Requested</sup> Direct Reply...Suspense Dec-1.. 3 ✓  
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Commissioner [unclear]

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Comms by review

The relevant section of the West Valley Demonstration Project Act simply requires DOE to "decontaminate and decommission" certain facilities "in accordance with such requirements as the Commission may prescribe." The only reasonable interpretation of this statutory requirement is that NRC's prescription of requirements shall be reasonably definite and discernable and shall guide and limit the choice of decontamination and decommissioning options available to DOE. The "approach" which the Commissioners are asked to approve turns this around by creating a nonbinding set of "proposed criteria" that DOE/NYSERDA may either follow or not follow. Depending on what DOE/NYSERDA decide to do, NRC will prescribe criteria! This is contrary to the intent of the West Valley Demonstration Project Act.

NRC staff may argue that their "proposed criteria" are binding unless DOE/NYSERDA show "some justification" (SECY-98-251, Travers memo, p. 5), yet the threshold for such justification is so vague (e.g., "prohibitively expensive," *ibid.*) as to be meaningless.

NRC and DOE appear to be uncomfortable in the roles of regulating agency and regulated agency, respectively, yet these are precisely the roles assigned to the two agencies by §2(a)(5) of the West Valley Demonstration Project Act.

The National Environmental Policy Act (NEPA) has specific requirements for clearcut decisionmaking and especially for review processes that are tied to points at which decisions are made. Those who are familiar with NEPA will recognize that the approach outlined in SECY-98-251 (Travers memo, pp. 4-5) is very vague with regard to decision points, decision sequences, and questions of decisionmaking authority, and that this vagueness prevents NEPA from being applied in any meaningful way. This is contrary to the intent of NEPA.

On at least one diagram given to the West Valley Citizen Task Force, the NRC decommissioning criteria are shown as an input to the preparation of the Supplemental Draft EIS on which DOE and NYSERDA are now working. This diagram correctly indicates the expectations of those involved in the West Valley EIS process, namely, that NRC would prescribe definite and discernable decommissioning requirements prior to the Supplemental DEIS, and that the decommissioning requirements would (as specified by the West Valley Demonstration Project Act) guide and limit the options available for decommissioning the West Valley site. The "approach" which the Commissioners are now asked to approve does not accomplish this.

2. A glib, cleverly constructed sentence in SECY-98-251 about "decommissioning criteria" appears to be an attempt to evade the intent of the West Valley Demonstration Project Act. As noted above, the West Valley Demonstration Project Act requires DOE to "decontaminate and decommission" certain facilities "in accordance with such requirements as the Commission may prescribe." I

submit that the various legislators who wrote and passed the Act either had a specific understanding of the word "decommission" or meant it to be interpreted according to standard usage of the word. Standard usage, in my opinion, matches NRC's definition of "decommission" in the Final Rule on Radiological Criteria for License Termination.

The approach which the Commissioners are asked to approve (Travers memo, last paragraph on p. 3) includes the following sentence: "The term 'decommissioning criteria' is used broadly here to include criteria for potential waste disposal at the West Valley site." I see this sentence as an underhanded attempt to redefine or blur the meaning of "decommission" in the West Valley Demonstration Project Act, and I submit that it would be inappropriate for the Commissioners to approve such tampering with statutory requirements. Please note that the West Valley Demonstration Project Act has different, distinct statutory requirements for decommissioning and disposal (§§2(a)(5) and 2(a)(4), respectively). Any attempt by SECY-98-251 to confuse these two requirements, or to redefine words without actually saying so, is wrong.

**3. Treatment of NEPA compliance in SECY-98-251 is deceptive and misleading.** First and foremost, the approval currently sought from the Commissioners on SECY-98-251 is not supported by a NEPA review process that is properly initiated, terminated, or related to the issue at hand, yet such approval would commit NRC to a definite course of action. Such course of action includes, for example, a tacit agreement to let DOE/NYSERDA (rather than NRC) choose whether long-term reliance on institutional controls is an acceptable way for DOE/NYSERDA to meet West Valley decommissioning criteria. NRC has traditionally limited the extent to which institutional controls can be relied upon. See, for example, NRC's Final Rule on Radiological Criteria for License Termination. See also SECY-98-251 (Travers memo). The NRC staff proposes therein on p. 4 that reliance on institutional controls should be restricted but also concedes on p. 5 that "it is possible that DOE/NYSERDA may choose a preferred decommissioning alternative in the EIS that requires extended reliance on institutional controls." Thus, it appears from this portion of SECY-98-251 that the approval sought from the Commissioners would (in part) relinquish NRC authority over the extent to which institutional controls can be relied upon at West Valley to meet decommissioning requirements. In my opinion, a decision by NRC to relinquish such authority would be a significant federal action affecting the environment, yet it would be accomplished under SECY-98-251 without any NEPA review that supports the decision at hand.

Beyond this, see the claim made in SECY-98-251, page 1 of Attachment 3: "NRC's cooperation in the [DOE/NYSERDA] EIS would support NRC's decisions in prescribing decommissioning criteria. Therefore, NRC avoids the need to prepare a separate environmental evaluation to comply with the National Environmental Policy

Act (NEPA) in support of NRC's Federal action in prescribing criteria." This is deceptive and misleading. NEPA review processes are required by law to have certain clearcut relationships to the decisions they support. I have asserted (see my correspondence with NRC staff in M-32 file) that NRC has not properly met NEPA requirements in this respect. One unmet requirement is that cooperating agencies such as NRC are expected to participate in the EIS scoping process. NRC did not participate in scoping due to the fact that NRC became a cooperating agency in the DOE/NYSERDA EIS relatively late, after scoping had occurred (though SECY-98-251 deceptively fails to mention this). After joining the EIS process, NRC made no attempt to re-scope or otherwise remedy its absence from the original scoping process, yet NRC entertains a broad, vague, and continually varying range of options for its decisionmaking on West Valley decommissioning criteria. Some of the items mentioned in SECY-98-251 (e.g., how NRC decommissioning criteria would relate to the reinstatement or other resolution of the NRC West Valley license; NRC's suggestion that some waste at West Valley might be regulated as 'incidental' waste) have never come under the umbrella of a scoping process.

SECY-98-251 fails to acknowledge another NEPA compliance problem that I have raised (see my correspondence with NRC staff in M-32 file), i.e., that NRC and DOE have drifted into a decisionmaking process that has the "functional interdependence" of 40 CFR 1501.5(a)(2) but have not met the requirements of §§1501.5(a) and (c).

According to SECY-98-251 (Travers memo, p. 7), NRC's Office of the General Counsel has done a review for legal implications and has no legal objection. I submit that the legal review failed to detect some potentially serious problems with NEPA compliance.

**4. A table in the SECY-98-251 material provided by NRC staff contains a misleading and misrepresented value for potential onsite dose if site restrictions fail within 1000 years.** See Table 2 of Attachment 3, which shows a projected dose of 0.07 rem/year from WMA 3 in the column for Alternative III. This value is represented as being from the West Valley EIS but is not from that source. According to the Draft EIS (e.g., Table 3-36 or Table D-11), the value in question should be 89,000 rem/year rather than 0.07 rem/year!

What has happened here is that a recently "reengineered" value has been substituted for the value published in the Draft EIS, without any acknowledgment of the substitution. SECY-98-251 fails to mention either the source of the 0.07 value or the objections I have raised (see my correspondence with NRC staff in M-32 file) to the questionable assumptions on which these "reengineered" values are based.

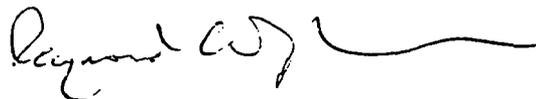
I do not wish to dwell here on the question of whether 0.07 rem/year or 89,000 rem/year is a better value for the projected

dose. However, I think it is deceptive and misleading for SECY-98-251 to substitute the lower number without acknowledging the source. It is also deceptive for SECY-98-251 to fail to mention that a value of 89,000 can be changed on paper to 0.07, inasmuch as the change (and the controversy over which is the better value) serve to illustrate the extreme sensitivity of projected doses to the assumptions made about engineered barriers, reliance on institutional controls, etc., at the West Valley site.

**5. SECY-98-251 does not acknowledge criteria already established by NRC for wastes at West Valley that contain between 10 and 100 nCi/g of transuranic elements.** The criteria in question were set by NRC as a follow-up to the Stipulation of Compromise Settlement and Malcolm Knapp letter of 1987 (SECY-98-251, Attachment 5). They can be found mainly in a series of documents in the M-32 file, and consist primarily of criteria for onsite disposal at West Valley. As such, they are not necessarily related to decommissioning criteria, yet there may be possible conflicts between the two sets of criteria. I have not had time to check, but I submit that the burden of ensuring that no conflict exists falls on NRC.

In conclusion, I again urge you and the other Commissioners to address and resolve the above issues prior to any approval of SECY-98-251.

Sincerely,



Raymond C. Vaughan

cc: Wm. D. Travers, NRC  
CTF



SECRETARY

UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 20, 1998

**Mr. Raymond C. Vaughan**  
**135 East Main Street**  
**Hamburg, NY 14075**

**Dear Mr. Vaughan:**

**This is to acknowledge receipt of your letter dated November 14, 1998 to Chairman Shirley Ann Jackson concerning West Valley decommissioning criteria.**

**A response is under preparation which will be forwarded to you shortly.**

**Sincerely,**

  
**John C. Hoyle**

To: Bill Hill  
(301) 415-1672  
Total pages: 2

COALITION ON WEST VALLEY NUCLEAR WASTES  
Sharp Street · East Concord, NY 14055 · (716) 941-3188

December 31, 1998

Shirley Ann Jackson, Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Chairman Jackson:

Thank you for your letter of December 24. I gather from your letter that the Coalition on West Valley Nuclear Wastes will not be invited to address the Commission at the January 12 meeting in Rockville. As you indicate in your letter, our written statement will receive the same consideration as will the oral presentations at the meeting.

This arrangement appears to be satisfactory. We have no particular desire to make an oral presentation as long as our 15-page written statement dated December 2 will receive equal consideration. Nevertheless, I want to raise a couple of possible procedural concerns about this arrangement. Let me run them past you, so to speak, and you and the other Commissioners can then decide whether anything further needs to be addressed in these areas.

Our purpose here is to eliminate any possible misunderstanding prior to the January 12 Commission meeting. We do not mean to suggest that any misunderstanding exists but believe that it is better to say too much rather than too little prior to this important meeting. Thus, please treat the remainder of this letter as a checklist. If you and the other Commissioners see nothing therein that needs further attention, then I think we can agree that there are no substantial procedural misunderstandings.

As background, please note the following points we raised in our letters of December 2 and 3. In our December 2 letter to Bill Hill (sent as a cover letter with the faxed copy of our December 2 statement), we asked, "Do the Commissioners want an opportunity at the January 12 briefing to ask questions in person regarding our enclosed written statement?" In our December 3 letter to you, (sent as a cover letter with the paper copy of our December 2 statement), we noted that we "are not planning to make an oral presentation at the January 12 briefing unless you think our presence there would be useful to provide further explanation or answer questions."

In your December 24 letter, you do not respond specifically to these points. Instead, you indicate 1) that other stakeholders, including the West Valley Citizen Task Force, have been invited to address the Commission on January 12, and 2) that written statements such as our own will receive equal consideration

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tion. These are the two areas in which we need to make sure that no misunderstanding exists.

One possible concern involves the following sentence in your letter: "The West Valley Citizen Task Force, of which you are a member, and other stakeholders, have been invited to address the Commission in that meeting." The phrase "of which you are a member" is factually accurate. If this phrase has no further implications, then we see no problem. If, on the other hand, the phrase implies that the Citizen Task Force (CTF) can and should present and explain the views of the Coalition on West Valley Nuclear Wastes on January 12, then we disagree. As you know, our 15-page statement delves into issues of greater complexity than those raised by the CTF. We do not mean to suggest any disagreement between our views and those of the CTF, but, simply, that we are a much older organization than the CTF and have dealt with certain aspects of the West Valley site in a more detailed or technical way than the CTF has done.

The second possible concern involves the equality of oral presentations and written statements. In and of itself, an oral presentation seems generally comparable to a written statement. However, you and the other Commissioners apparently intend to ask questions and/or engage in discussion with those who make oral presentations on January 12, presumably for the purpose of improving understanding of various points. This is the area in which we are concerned that a written statement may not receive equal consideration. Granted, the Commissioners would also have the option of using letters or telephone calls to ask questions or engage in discussion of our December 2 statement. In either case, we think it is incumbent on the Commissioners to employ methods at their disposal to ensure a clear understanding of the points raised in our 15-page statement dated December 2. In the absence of oral or written questions, we will assume that all of the points we have raised are clearly understood.

In conclusion, we think the January 12 meeting and the pre- and post-meeting deliberations of the Commissioners will provide a welcome opportunity for NRC to gather relevant information and move toward a clear policy for the West Valley site. We look forward to the outcome and wish you well in this and your future endeavors.

Sincerely,



Raymond C. Vaughan

cc: T. Attridge, CTF  
B. Mazurowski, DOE  
P. Piciulo, NYSERDA  
P. Merges, DEC