

ORIGINAL

NRRC PUBLIC DOCUMENT REPORT

NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

PUBLIC MEETING

AMERICAN ATOMICS PLANT SHUTDOWN (ARIZONA)

Place - Washington, D. C.

Date - Monday, 18 June 1979

Pages 1-74

Telephone:
(202) 347-3700

ACE - FEDERAL REPORTERS, INC.

Official Reporters

444 North Capitol Street
Washington, D.C. 20001

NATIONWIDE COVERAGE - DAILY

282 098

7907036413

DISCLAIMER

This is an unofficial transcript of a meeting of the United States Nuclear Regulatory Commission held on Monday, 18 June 1979 in the Commission's offices at 1717 H Street, N. W., Washington, D. C. The meeting was open to public attendance and observation. This transcript has not been reviewed, corrected, or edited, and it may contain inaccuracies.

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

CR5451

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

PUBLIC MEETING
AMERICAN ATOMICS PLANT SHUTDOWN (ARIZONA)

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

Monday, 18 June 1979

The Commission met, pursuant to notice, at 3:00 p.m.

BEFORE:

- VICTOR GILINSKY, Commissioner (presiding.)
- RICHARD T. KENNEDY, Commissioner
- PETER A. BRADFORD, Commissioner
- JOHN F. AHEARNE, Commissioner

ALSO PRESENT:

Messrs. Chilk, Gossick, Ryan, Kerr, Shapar, Dircks, and Bassin.

P R O C E E D I N G S

#1

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

(3:00 p.m.)

COMMISSIONER GILINSKY (presiding): Lee, could you start?

MR. GOSSICK: All right, I think I'll ask Mr. Ryan to sort of lead off the subject. Wayne Kerr has just returned over the weekend from being out there where this matter is going on in Arizona, but Bob, why don't you go ahead with the background.

COMMISSIONER GILINSKY: Could I just say a word here? I hope that we'll cover both the health and safety problem and the recent history of NRC's involvement. I understand there have been discussions with them, and as you said, Wayne Kerr has just returned from Arizona.

COMMISSIONER KENNEDY: Can we sort of start from ground zero?

MR. GOSSICK: Start from the beginning, right.

MR. RYAN: Okay, the first time I heard of a problem with tritium at this facility, which is licensed under the Agreement State by the State of Arizona, was on the 28th of February last when Commissioner Kennedy and his staff were in that region for a speech on a completely unrelated matter -- I believe it was on high-level waste -- and as I recall, Commissioner Kennedy, your staff, or you personally, were approached by some newspaper reporters --

1 COMMISSIONER KENNEDY: I was.

2 MR. RYAN: You were, personally.

3 -- who alleged that there were occupational
4 overexposures taking place within the plant, American
5 Atomics. There had been some newspaper coverage of it.

6 Your man, Stevens, told me on the 28th --

7 COMMISSIONER KENNEDY: Stevens? Or Gibert?

8 MR. RYAN: Gibert, excuse me.

9 And we contacted Arizona the same day. We
10 received subsequently a copy of an enforcement letter which
11 the Arizona Atomic Energy Commission had issued to the
12 facility dated the 9th of March, 1979, and we've had a
13 number of discussions with the --

14 COMMISSIONER KENNEDY: What was the nature of that
15 enforcement letter?

16 MR. RYAN: The enforcement letter said a number
17 of things. Let's see if I can spell them out in some
18 detail.

19 It's headed "Notice of Violation" --

20 COMMISSIONER KENNEDY: Let me say that, at the
21 same time that I called you, I made the Arizona -- the
22 Executive Director of the Arizona Atomic Energy Commission --

23 MR. RYAN: Mr. Don Gilbert, right.

24 COMMISSIONER KENNEDY: That's right, Don Gilbert,
25 aware of this concern. And he said that he was aware of

1 some difficulties and was looking into it.

2 MR. RYAN: Right. Mr. Don Gilbert has subsequently
3 left the Arizona Atomic Energy Commission.

4 COMMISSIONER KENNEDY: Very shortly thereafter.

5 MR. RYAN: I think he was in the process of
6 leaving even while you were out there. That's my understanding
7 at any rate.

8 "Notice of Violation, dated March 30, 1979:
9 The licensee is not operating in compliance with the
10 Arizona Atomic Energy Commission Regulation R-121 407(a),
11 in that it has been discharging and will have discharged on
12 a one-year average for the period of time April 1, 1978,
13 through March 31, 1979, to an unrestricted area the radio-
14 active material hydrogen 3, in the air in concentrations
15 which exceed the limits specified in that section.

16 "It is therefore directed that the licensee,
17 American Atomics, demonstrate sufficient control over this
18 radioactive material to comply with that section."

19 The Arizona regulation defines "restricted area"
20 as "any area access to which is controlled."

21 Accordingly, the work rooms are the restricted
22 area. The inspectors reported that they drove onto the
23 property, parked their vehicle and approached the building
24 with no control being exercised.

25 At the same time -- at the time of the inspection,

1 the licensee possessed approximately 370,000 curies of
2 hydrogen 3, which is in excess of the license possession
3 limit. Some of the license items -- and they cite the
4 license paragraphs -- which items individually specify
5 maximum quantity that the licensee may possess at any one
6 time in certain specified chemical or physical forms, allows
7 only a maximum total of 285,510 curies.

8 "The Arizona Atomic Energy Commission is in
9 receipt of a request for license amendment from American
10 Atomics to increase possession limits, and this will
11 receive immediate attention as soon as the licensee has
12 demonstrated adequate accountability for hydrogen 3.

13 "Because of the existing excess, the licensee is
14 not in compliance with the Arizona Atomic Energy Commission
15 regulation number specified and the conditions specified in
16 the license.

17 "3. The licensee's stack monitoring equipment is,
18 and apparently has been for sometime insufficiently sensitive
19 to detect, measure, and record H₃ concentrations in the
20 stack at and below the maximum permissible concentration
21 level. This is in violation of the license.

22 "The licensee has, since July 1978, added an
23 additional type of stack monitoring equipment. The adequacy
24 of the licensee's new equipment has not been demonstrated.
25 The licensee is directed to demonstrate adequate detection

1 capability of the stack monitoring equipment.

2 "4. The accountability of hydrogen 3 in the
3 category 'of normal operational losses' appears excessive
4 and such general categorization is unacceptable. This is
5 not in compliance with R-1.2-1-109, which requires 'records
6 showing the receipt, transfer, and disposal of all sources.'

7 They are thereafter required to respond within
8 30 days indicating both the directions contained in this
9 report have been adhered to, and that all items have been
10 brought into compliance.

11 "If you fail to either comply or respond, you
12 will be in violation of law and the Commission regulations,"
13 and they cite the sections.

14 COMMISSIONER GILINSKY: When did they inspect that
15 facility?

16 MR. RYAN: There was an inspection of that
17 facility --

18 MR. GOSSICK: Last night.

19 MR. RYAN: Well, let's go back. An inspection was
20 conducted August 17th, 1978. Four violations, including
21 one related to inventory losses, was noted. There was a
22 reinspection on March 9th, 1979. Four violations,
23 including excessive releases, and more material on hand
24 than authorized.

25 There was another investigation on May 7th, 1979.

282 105

1 It disclosed the licensee received more material and
2 inventory continued in excess of the authorization.

3 That's basically -- there have been subsequent
4 visits to the facility since that time by the Arizona
5 Atomic Energy Commission.

6 The matter came something to a head on --

7 COMMISSIONER GILINSKY: Could you say something
8 about the hazard that's involved there?

9 MR. RYAN: Sure. I'll leave that to our health
10 physics expert, if I may, but I think the general proposition
11 from which we work is that tritium is not good for you, and
12 it should not be found in the quantities that it is found
13 off-site if the process at the plant is properly working.
14 We'll go through the numbers for you in a minute.

15 But let me say that the matter came to a head --

16 COMMISSIONER KENNEDY: Excuse me, Bob, to clarify
17 this for my own thinking, you said in August 1978 they had
18 done an inspection, and at that time did they find significant
19 releases of tritium occurring?

20 MR. RYAN: I don't believe they found significant
21 releases.

22 Wayne, can you help me on that? The August '78 --

23 MR. KERR: There were three that are generally
24 considered somewhat minor-type violations. One, gloves were
25 not worn by some people during operation. Some contaminated

1 gloves were being disposed of in some improper containers --
2 probably meaning, unlabeled as "radioactive."

3 Some lack of security, as I understand. This had
4 to do with some of these little glass things being dropped
5 on floor surfaces and broken, things like that.

6 And one that is heavily involved in the current
7 situation, these large inventory losses. They were writing
8 large numbers off as to operating losses. These were found
9 on a report that is filed with Oak Ridge that is required
10 by NRC to be filed on accountability. Large tritium users
11 have to follow certain reporting requirements, and there was
12 an entry apparently that said "operating losses," and that
13 is really what's culminated now in a number of the releases
14 that they've had.

15 COMMISSIONER KENNEDY: Now what did the Arizona
16 Commission say about that? Did they look into that?

17 MR. KERR: That was one of those citations here
18 in the March one.

19 COMMISSIONER KENNEDY: Yes, but not in August?

20 MR. KERR: It was a citation then, but it was not
21 considered with the same intensity that it certainly is now
22 after the March 9th inspection.

23 MR. RYAN: After that inspection, the Arizona --

24 COMMISSIONER KENNEDY: The March 9th inspection
25 coincides with the March 9th order.

1 MR. KERR: Well, no, the March the 30th order.

2 COMMISSIONER GILINSKY: It would help me if you
3 could just say a few words here about where the material
4 comes from and what sort of form that it's in. Just what
5 are we dealing with here? If you don't mind, just --

6 MR. KERR: Okay, they handle a variety of kinds,
7 some in steel products and things, but the source of the
8 problem, no doubt, is when they receive very large
9 quantities like 100,000 curies' shipments --

10 COMMISSIONER GILINSKY: Where does it come from?

11 MR. KERR: From Oak Ridge, Carbide. Most people
12 buy it from Oak Ridge.

13 COMMISSIONER GILINSKY: And how large a quantity is
14 100,000 curies?

15 MR. KERR: A few grams. It comes, I understand,
16 in a small, rather small bottle, a flask or a metal container
17 in gaseous form. And then they start to process this and
18 they fill these very minute glass tubes that eventually now
19 end up in backlit wrist watches, and some in exit signs.
20 And as I understand their process, they use a laser process
21 for cutting these things. So if it's sealed properly, you
22 know, what's in there is fine; but there's no doubt some
23 material is released during the sealing process. We have
24 some that are defective, things like that.

25 And that's the general type of an operation.

1 COMMISSIONER KENNEDY: When you say "a few grams
2 in a gaseous form," what's the total volume of this gas?
3 What are we talking about? Again, I'm not quite sure I
4 have a picture of what we're dealing with coming into this
5 plant.

6 MR. KERR: I understand that a 100,000-curie
7 shipment would be in a rather modest-sized bottle -- you
8 know, maybe a foot, or a foot-and-a-half tall and, you know,
9 a cubic foot or something like that. I don't know
10 specifically.

11 MR. RYAN: Under pressure.

12 MR. KERR: Yes, under pressure.

13 COMMISSIONER GILINSKY: And what sort of risks are
14 involved here, an open safety risk.

15 MR. KERR: Okay, anytime, you know, you handle
16 large quantities of tritium, it should be handled in a
17 hooded-type operation, something like this, the container,
18 as the operators work with it.

19 And if you do not have a mechanism for containing
20 the material that goes up the stack, then that's what you
21 would have resulting in big releases, because you may have,
22 you know -- because the production of these things are by
23 the thousands, I understand.

24 COMMISSIONER GILINSKY: And how is this material
25 controlled? Is there an allowable level for releases?

1 MR. KERR: Yes.

2 COMMISSIONER GILINSKY: And what would that be?

3 MR. KERR: The Commission's regulations allow --

4 COMMISSIONER GILINSKY: This is the Arizona
5 Commission?

6 MR. KERR: And it's the same as ours. It's for
7 effluent releases to unrestricted areas in air, the most
8 restrictive limit is 200 picocuries per liter. You can make
9 a note of that: 200 picocuries per liter. That's an
10 unrestricted area.

11 COMMISSIONER GILINSKY: Per liter of air?

12 MR. KERR: Yes, right. Per liter, you know, of
13 the effluent going out.

14 COMMISSIONER AHEARNE: Is "location of the plant"
15 defined as an "unrestricted area"?

16 MR. KERR: After this one citation, they then
17 made the entire plant boundary the restricted area. Prior
18 to that, they were using "at the point of release," which is
19 a somewhat common approach to do, although you are well
20 entitled to take care of restricted area if you can control
21 access for the purpose of the radiation effect.

22 COMMISSIONER GILINSKY: I'm sorry, I didn't
23 understand this point. What is the distinction?

24 MR. KERR: Okay, originally as I understand it,
25 they were taking the concentrations -- when they cited them

1 for excessive releases -- within the stack. They were making
2 a measurement in the stacks.

3 COMMISSIONER KENNEDY: In the stack?

4 MR. KERR: Yes -- or at the point of release from
5 the stack, yes.

6 So theoretically, if that then had not been defined
7 as a "restricted area," you have to use the concentration
8 limit for the off-site. Once they made and established that
9 they would control access to, like the fence line around,
10 then you can consider the restricted area the fence line
11 around the plant.

12 COMMISSIONER GILINSKY: That would be a more
13 permissive approach.

14 MR. KERR: It would allow you a dilution factor.

15 COMMISSIONER BRADFORD: If in fact you were
16 emitting 200 picocuries per liter at the fence on a constant
17 basis, what kind of a dose would that result in over 24 hours,
18 to an individual who sat at the fence for a whole day.

19 MR. KERR: Let me tell you in terms of a yearly.
20 A yearly, if a person stood there 168 hours a week, a full
21 week, spent all his time, that would result in 500 millirems
22 a year, the way I understand our regulations are structured.

23 COMMISSIONER GILINSKY: 500 millirems?

24 MR. KERR: 500 millirems per year.

25 COMMISSIONER BRADFORD: That's if the person spent

1 365 days there?

2 MR. KERR: That is correct.

3 MR. RYAN: I should say that one of the citations
4 by the state suggested that American Atomics was releasing
5 excessive quantities of tritium to the atmosphere to the
6 tune of 60,000 curies per quarter, which would translate
7 to 240,000 --

8 MR. KERR: Well, just a minute. That is -- that
9 is approximately right. The total quantity is a significant
10 question, but the citation is based on the concentration per
11 liter.

12 MR. RYAN: Right.

13 MR. KERR: The citation is on the concentration,
14 because that's the way the regulations express it.

15 COMMISSIONER GILINSKY: Do I understand you to be
16 saying that we're more permissive here than we would be
17 with a reactor in terms of releases?

18 MR. KERR: Yes, sir. You know, in terms of the
19 ALARA, a terms which I think is what you're referring to,
20 there is no ALARA number established for this kind of
21 facility that I know of, or most materials licensees.

22 COMMISSIONER BRADFORD: How many facilities like
23 this are there?

24 MR. KERR: I know of three in the United States
25 that are in similar type operation.

1 COMMISSIONER AHEARNE: And are those three --

2 MR. RYAN: One in Pennsylvania, I guess two in
3 New York.

4 MR. KERR: One in New York, that I know of.

5 MR. RYAN: Part 20 does say they're encouraged --
6 all licensees are encouraged to keep these --

7 COMMISSIONER AHEARNE: Are these plants that are
8 regulated by us? Or are those also state regulations?

9 MR. KERR: One other one is state regulated, and
10 one is regulated by NRC.

11 COMMISSIONER BRADFORD: Would they have similar
12 histories?

13 MR. KERR: We -- the NRC visited the one in
14 Pennsylvania last week. They have some question about the
15 operation; certainly in terms of the total quantities being
16 released from that plant, they are much, much less than
17 what they are in the one in Arizona.

18 MR. RYAN: And the same is true of New York.

19 MR. KERR: Almost the identical situation in New
20 York. They are having some questions about handling
21 procedures in the New York one, and some occasional releases
22 where they've gotten some detectable material in the river
23 and so forth.

24 But again, the total quantities, so far as we
25 know, being released are much, much less than what they are

1 at this Arizona facility.

2 COMMISSIONER AHEARNE: Now when you're saying
3 "much, much less quantities released," is this going back to
4 that 60,000 curies?

5 MR. KERR: Yes, that's in total. And the total
6 curies. It's my understanding that the Pennsylvania
7 facility is releasing in the neighborhood of 700 curies per
8 year; whereas, the Arizona one may be in the range of a
9 quarter of a million.

10 It's my understanding the New York facility may
11 be releasing 1000 to 1400 curies per year.

12 COMMISSIONER BRADFORD: Now you've mentioned the
13 number 375,000 curies -- or rather, Bob did -- that was
14 per shipment?

15 MR. KERR: No, the citation was that they possessed
16 at the time they made the inspection about 370,000 curies,
17 and they said at the time their possession limit was 285,000
18 curies, so they were in overpossession of 100,000.

19 COMMISSIONER BRADFORD: How many curies actually
20 pass through that plant in a year?

21 MR. KERR: We understand it's in the range of a
22 million or so throughput.

23 COMMISSIONER AHEARNE: And you're saying they
24 lose 25 percent of it?

25 MR. KERR: That's what I understand.

282 114

1 COMMISSIONER GILINSKY: What is -- I'm sorry.

2 COMMISSIONER BRADFORD: How many curies actually
3 go into a tritium watch?

4 MR. KERR: I don't remember the numbers in the
5 tritium watches. I think it's a few hundred millicuries
6 in one tritium watch.

7 COMMISSIONER BRADFORD: It seems to me you could
8 make a lot of watches.

9 MR. KERR: They make a lot of watches, and they
10 do also make exit signs, luminous exit signs, for like
11 apartment buildings and so on, which have in the range, as
12 I understand, I think of about 20 curies per sign, or
13 thereabouts. This is in case you have a lack of -- you
14 know, the electricity goes out in an apartment building, and
15 you have a sign similar to those you have in airplanes so
16 that you can see the exit sign.

17 COMMISSIONER GILINSKY: When you said 500 millirem,
18 you're talking about whole-body doses?

19 MR. KERR: The whole body is a critical organ for
20 tritium.

21 COMMISSIONER GILINSKY: What does tritium emit?

22 MR. KERR: The beta unit.

23 COMMISSIONER GILINSKY: An energetic beta?

24 MR. KERR: It's .0186 MED. 12-year half-life,
25 the biological half-life is in the range of 10 to 12 days.

1 MR. RYAN: After the -- if I may resume -- after
2 the citation and the unannounced inspection, the Arizona
3 radiation program contacted a tritium expert, who is
4 Dr. Alan Moghissi from the Environmental Protection Agency,
5 who, by the way, was on hand for the hearing on Saturday.

6 They also began to take environmental samples,
7 food and urine samples --

8 COMMISSIONER KENNEDY: What hearing on Saturday?

9 MR. RYAN: There was a hearing by the Arizona
10 Atomic Energy Commission on Saturday --

11 COMMISSIONER KENNEDY: You'll be coming to that?

12 MR. RYAN: We'll be coming to that -- at which
13 Mr. Dick Cunningham testified for about five hours.

14 The sample gathering took place throughout May,
15 and on the 31st of May EPA phoned in some results of samples.
16 I should point out that this facility is in a -- is along
17 a road which is heavily populated with plants for processing
18 food. There are also some churches nearby.

19 COMMISSIONER KENNEDY: It's in Tucson?

20 MR. RYAN: Yes.

21 There are also residences in the immediate
22 vicinity of the facility which, by the way, is unmarked.
23 You would not recognize it as being American Atomics if you
24 drove by.

25 One sample which was significant was found in the

1 water used in making cake in a food processing plant,
2 cheek-by-jowl with this facility, which supplied the school
3 lunches for the children of Tucson. The sample came back
4 and was phoned in to us on June 1.

5 COMMISSIONER GILINSKY: How long has American
6 Atomics been engaged in this business?

7 MR. RYAN: They have been engaged in the business
8 for sometime, but only actively in tritium for the last
9 approximately four years. They were one of the licensees
10 which were assigned to the State of Arizona for supervision
11 at the time the AEC entered into the Agreement with the
12 State of Arizona in 1967. But their work was with krypton
13 and their continuing and expanded work with tritium dates
14 back to only about four years.

15 COMMISSIONER BRADFORD: Bob, what are the
16 requirements for off-site monitoring for this facility?

17 MR. RYAN: There are very few.

18 Wayne, I'll let you talk to that. I talk it
19 more specifically.

20 MR. KERR: I don't think there was anything
21 specific in this one. It's my understanding that probably
22 the situation was they were relying upon stack effluent
23 monitoring, and that --

24 COMMISSIONER KENNEDY: Excuse me, Wayne. Do our
25 regulations require any?

1 MR. KERR: There's nothing in our regulations
2 that require people to do any specified kind of monitoring.
3 Let me tell you, for example, what I understand the
4 Pennsylvania person is doing, and what I understand we may
5 be after.

6 They have a monitor at a fence line, which is
7 also nearby, but there are questions whether that is
8 detecting the plume from that plant. And so monitoring
9 should be out where you estimate the plume will come.

10 And again, I can't speak from experience by saying
11 I've looked at all three licenses, and say that they did
12 require certain type of monitoring out in the environment.
13 Many licensees frequently rely upon a calculation of stack
14 effluent, and if it appears, you know, they're operating
15 within limits, normally I would think you would expect it
16 to be more within limits, you know --

17 COMMISSIONER GILINSKY: Did you say "calculation
18 of stack effluents" to measuring effluents?

19 MR. KERR: In this case, they did have a
20 measurement. They did have a measuring device. Arizona
21 has questioned the adequacy of that measuring device.
22 Nonetheless, they had a measuring device in the stack.
23 And based on measurements and/or calculations, it varies
24 by different kinds of licensees. Some more modest, but
25 you know they may have effluent, people do calculate what is

1 going up there, and if it appears, you know, rather low,
2 we probably would not require, you know, an independent stack
3 monitoring.

4 COMMISSIONER AHEARNE: What do we require?

5 MR. KERR: I cannot speak specifically of what we
6 required in the case of Pennsylvania, but it's my under-
7 standing they must have some knowledge because they know
8 about 700 curies per year are being released from the
9 Pennsylvania plant.

10 COMMISSIONER AHEARNE: Bill, do you know what we
11 require?

12 MR. DIRCKS: Nat Bassin is head of that section,
13 the Industrial Products Section.

14 COMMISSIONER KENNEDY: I can't hear you, Bill.

15 MR. DIRCKS: Nat Bassin is head of the Industrial
16 Products Section.

17 MR. BASSIN: Right now, we don't require any
18 environmental monitoring. We have depended on measurements
19 at the fence boundary and diffusion calculations which would
20 show that the concentration of tritium at the site boundary
21 would be in compliance with the requirements in Part 20.

22 COMMISSIONER GILL: But how do you know how
23 much is released?

24 MR. BASSIN: They have records based on air flow
25 through the stack. Everything is released at Bloomsburg

1 through one stack, all of the gaseous tritium. So based on
2 the concentrations measured at the exit of the stack and
3 the amount of air flowing through the stack, they have
4 determined the amount of tritium that is released.

5 COMMISSIONER AHEARNE: Do we require this stack
6 monitoring?

7 MR. BASSIN: Yes. We require stack monitoring.
8 I think Wayne indicated that we're not entirely happy with
9 the boundary monitoring because the plume might not touch
10 down.

11 They have monitoring at the stack -- at the site
12 boundary which indicates that the concentrations are well
13 below Part 20, but they are -- we were up there last week,
14 and they are undertaking a program of environmental
15 monitoring. I understand that our Office of Inspection and
16 Enforcement is also going to be going out and doing some
17 followup work.

18 COMMISSIONER AHEARNE: Let me see if I can make
19 clear, though, we do require stack monitoring, you say?

20 MR. BASSIN: Yes, sir.

21 COMMISSIONER AHEARNE: And in that monitoring, do
22 we put a requirement on the sensitivity of the instrument?

23 MR. BASSIN: Well, we look to see that the
24 instrumentation that they have is capable of measurement.
25 And actually, at U.S. Radium in Bloomsburg, the releases at

1 the exit of the stack are higher than would be permitted for
2 unrestricted areas, but they're depending on dilution
3 between the top of the stack which is about 60 feet high,
4 and the site boundary, for compliance.

5 And the question we have now: Is the monitoring at
6 person-height at the site boundary really adequate to really
7 tell you what is actually crossing the site boundary?

8 COMMISSIONER GILINSKY: But, Wayne, you seemed to
9 be saying earlier that the rate at which tritium was leaving
10 the Arizona facility was at least a couple of hundred times
11 greater than the rate at which it was leaving this
12 Pennsylvania facility?

13 MR. KERR: The total quantities released are very
14 much greater, based on the best records that are available,
15 the total quantities released. But now again, they cited
16 them for excessive concentrations that amounted to, in the
17 range of --

18 MR. DIRCKS: I think it might be --

19 MR. BASSIN: The amount of tritium throughput at
20 the U.S. Radium facility is about 50,000 curies per year,
21 well below that at American Atomics, and their loss rate
22 in operating losses is about 1 percent, or just a little
23 over 1 percent of the amount of throughput.

24 For 1979, if they continue to release at the same
25 rate they're releasing now, they would release about 550 curies

1 of tritium, which is just about 1 percent of the throughput.

2 COMMISSIONER GILINSKY: Well, I guess where I was
3 headed is: How could a difference which is so great go
4 undetected for such a long period of time, assuming it was
5 in fact there for that time?

6 MR. KERR: Okay, the most current information I
7 have, Commissioner, is that the March inspection disclosed
8 the releases in concentrations perhaps 11, and in some
9 cases -- depending upon some of the MPCs you use, and there
10 are varying MPCs -- but 11 times MPC in the stack.

11 Now they did apply diffusion calculations, also,
12 and determined then that at the site boundary it was
13 probably just about below -- right at MPC.

14 COMMISSIONER GILINSKY: How could you get 11 times
15 it in the stack, to permissible level at the site boundary?

16 MR. KERR: It doesn't take very much to do that.
17 You know, it disperses rather readily, even though it's a
18 fairly close boundary.

19 COMMISSIONER BRADFORD: In comparison between
20 the Pennsylvania situation and the Arizona situation with
21 regard to following, do we actually read in Pennsylvania,
22 or does the State of Arizona actually read the instruments
23 in Arizona? Or is that done entirely by the licensee?

24 MR. KERR: Well, the record of the releases are
25 subject to inspection by the State of Arizona.

1 COMMISSIONER BRADFORD: That's what he writes
2 down. How do we know that's what it was actually?

3 MR. KERR: I understand. They're not there all
4 the time to read the instrument.

5 COMMISSIONER KENNEDY: Nor are we up in Pennsylvania.
6 We simply verify what he wrote down.

7 MR. KERR: Now they may be continuous -- there
8 may be continuous recording. The State of Arizona, one of
9 their charges in this case is that they do not have
10 adequately recorded, also, some of these things, but if it
11 was a continuous recorder, then theoretically it's subject to
12 inspection at any time.

13 COMMISSIONER AHEARNE: And all the loss rate is
14 through the stack?

15 MR. KER : Well, I don't want to say 100 percent,
16 but as far as we know that's the problem case.

17 MR. RYAN: One of the problems.

18 COMMISSIONER AHEARNE: How expensive is tritium?

19 MR. KERR: A dollar a curie.

20 COMMISSIONER AHEARNE: So that \$250,000 a year is
21 going up the stack?

22 MR. KERR: Yes, that's right.

23 MR. RYAN: Let me get back to this sample which
24 was phoned in to us on June 1, conducted by the -- the
25 sample was analyzed by the EPA at its laboratory at Las Vegas,

1 and it showed in loose water in cake, 56,000 picocuries per
2 liter.

3 COMMISSIONER KENNEDY: 56,000?

4 MR. RYAN: That's right.

5 The EPA drinking water standard is 20,000
6 picocuries per cubic liter. The Arizona Atomic Energy
7 Commission and radiation staff also took a number of other
8 samples, the results of which came in the following Monday.
9 Let me get to those in a minute, but on Friday, June 1, our
10 man, Joel Lubenau, who was functioning for Wayne in his
11 absence, at my direction called the Arizona Atomic Energy
12 Commission and said that it was our recommendation that the
13 facility should be closed down immediately.

14 I should point out that the Pima County Health
15 Department immediately moved in and closed the facility
16 which had been preparing school lunches.

17 On June 2, which was a Saturday, the Arizona
18 Atomic Energy Commission met in emergency meeting and the
19 final result of their deliberation was a 4 to 3 vote to
20 allow the plant to continue in operation.

21 Our recommendation was placed before the Atomic
22 Energy Commission by Mr. Geiser -- a conversation between
23 Mr. Geiser and the head of the commission, a fellow by the
24 name of Willis.

25 COMMISSIONER GILINSKY: Your recommendation was

1 the wrong one, or --

2 MR. RYAN: Yes, our recommendation was the normal
3 one.

4 However, on Monday, a number of other samples came
5 in. Monday, this would be the 4th of June. A swimming
6 pool which is owned by a Roman Catholic Church immediately
7 behind the facility showed concentrations of 417,000 pico-
8 curies per liter.

9 A backyard pond, goldfish pond, had 74,000
10 picocuries per liter.

11 Tap water in the food plant showed 4000 picocuries
12 per liter.

13 The urine of residents was analyzed and the
14 results came back that Monday. The highest reading was
15 39,800 picocuries per liter in a 6-year-old boy.

16 As I say, we also learned that there were a number
17 of other food processing plants in the immediate vicinity of
18 it.

19 As a result of this information, and as a result
20 of the fact that our oral recommendation had been rejected,
21 I sent William Willis a telegram. William Willis is the
22 Chairman of the Arizona Atomic Energy Commission. This went
23 out on June 4th. And we said --

24 COMMISSIONER GILINSKY: Are you going to read it?

25 MR. RYAN: I'll read part of it. *It's a shorty.*
282 125

1 Go ahead.

2 COMMISSIONER GILINSKY: No, I just was hoping to
3 see it.

4 MR. RYAN: Okay, I'd be happy to give it to you.

5 "We understand a recent inspection by state
6 disclosed excessive releases of tritium to the atmosphere
7 have occurred, and that the state has cited the licensee
8 for noncompliance with Arizona regulations covering release
9 of radioactive material to the atmosphere.

10 "We further understand samples of food collected
11 from a nearby food processing plant serving the local school
12 system has been analyzed by the U.S. Environmental
13 Protection Agency and found to contain tritium in excess of
14 EPA limitations in drinking water.

15 "We also understand the Arizona Atomic Energy
16 Commission Staff, acting on this information and working with
17 the local county health department, has arranged a shutdown
18 of the food processing plant in which the sample was
19 obtained.

20 "The Office of State Programs on June 1, 1979,
21 recommended immediate shutdown of the licensee's operation.
22 We further understand that this recommendation was conveyed
23 to the acting executive director of the Atomic Energy
24 Commission, to the commission, during its emergency session
25 on June 2, 1979.

1 "I understand that your commission voted to allow
2 American Atomics Corporation to continue in operation. I
3 wish to renew this office's recommendation for the immediate
4 closing of American Atomics Corporation. This is a prudent
5 and, in our judgment, a necessary measure to take until
6 further information is available.

7 "The NRC is ready to assist the state in this
8 matter. Please do not hesitate to ask for our help."

9 The help that we talked of consisted of two
10 inspectors from our Region 5 office who arrived there early
11 last week to assist the state in taking samples. There are
12 a number of other samples which have come in since that
13 time, all of which show elevated levels of tritium.

14 I might point out that this is the only facility
15 in the area which handles tritium in the normal course of
16 its operations. Therefore, it seems to me it's the only
17 possible source of this tritium.

18 I have no idea of how this tritium is getting into
19 the water which is used in making the cake across the street,
20 or how it's getting into the swimming pool of the Roman
21 Catholic Church.

22 I suspect that it has to do with the emissions from
23 the stack, although I cannot prove that. One of the problems
24 which EPA encountered was that they could not lay hands
25 immediately on equipment which could be brought in to measure

1 the stack emissions.

2 I heard from Chairman Hendrie on Wednesday of
3 last week, who told me that Governor Babbitt was exercised
4 about my telegram to the Arizona Atomic Energy Commission.

5 COMMISSIONER GILINSKY: Did we, by the way, get
6 copies of this?

7 MR. RYAN: Did I get copies of it?

8 COMMISSIONER GILINSKY: Did the Commissioners get
9 a copy of this?

10 MR. RYAN: Yes, we sent you a preliminary notifi-
11 cation on the same day.

12 COMMISSIONER BRADFORD: I don't think the wire
13 itself came down, though, Bob.

14 MR. RYAN: Commissioner Ahearne's office asked
15 for it, and the substance was in our notice. It was a
16 preliminary notification I believe dated June 4.

17 COMMISSIONER GILINSKY: What day of the week would
18 that have been?

19 MR. KERR: June 4.

20 MR. RYAN: Monday.

21 MR. KERR: Preliminary Notification No. 79-13 came
22 down June the 4th.

23 COMMISSIONER AHEARNE: Yes, they had mentioned --

24 MR. RYAN: I might say that before we sent the
25 telegram I consulted with Mr. Gossick, with Mr. Shapar, and

1 with representatives from Mr. Dircks' office.

2 The representation from Mr. Dircks' office was at
3 three levels. I talked to Jay Casner, to Bernie Singer,
4 and to Dick Cunningham. And I put to them the facts that
5 I had at hand, and I said: What would you do if you had
6 a similar situation in a non-Agreement State?

7 And I got a universal response: We would shut it
8 down and conduct an immediate investigation to find out
9 how this tritium was getting out where it shouldn't be.

10 It was a fair inference, all of those gentlemen
11 said, that there's something radically wrong in the process
12 of this company which allows this kind of tritium to escape
13 to the environment.

14 I met with the Governor later on that afternoon,
15 and I didn't find him to be irritated.

16 COMMISSIONER KENNEDY: I think we ought to go back
17 just one second.

18 MR. RYAN: Sure.

19 COMMISSIONER KENNEDY: You said he was upset, or
20 exercised, about your telegram?

21 MR. RYAN: Yes.

22 COMMISSIONER KENNEDY: In what -- How am I to
23 interpret that statement?

24 MR. RYAN: I didn't have the original conversation
25 with the Governor. Chairman Hendrie did. I gather the

1 Governor gave Chairman Hendrie the impression that he felt
2 sandbagged -- that was the phrase that Chairman Hendrie used
3 to me.

4 COMMISSIONER KENNEDY: In what way?

5 MR. RYAN: I asked the same question. I said,
6 the reason I had sent Governor Babbitt a copy of my telegram
7 was to put him on notice.

8 You see, there is a problem out in Arizona, and
9 it is that the Arizona Atomic Energy Commission is a quasi-
10 independent organization. It is not a cabinet department,
11 official -- Chairman Hendrie, in the sense that the
12 Transportation Department of the State of Maryland is a
13 cabinet Department reporting to Governor Hughs. Governor
14 Hughs has control over that cabinet department because he
15 can tell the cabinet department what he wants done, and how
16 he wants it done, and the incumbent serves at the pleasure
17 of the governor.

18 That is not the case with the 12-man Atomic
19 Energy Commission of the State of Arizona. It is a quasi-
20 independent organization. The members serve for terms,
21 rather than at the pleasure of the governor. And the
22 governor's authority is ultimately by the power of appoint-
23 ment, but many of the members of the Atomic Energy Commission
24 of the State of Arizona were appointed long before Governor
25 Babbitt ever came to office, when Governor Babbitt was sworn

1 in in January of this year.

2 MR. GOSSICK: Let me just add one point here. The
3 Chairman called me, after having spoken to Bob -- or
4 actually, I saw him downtown here, and he had indicated
5 that he'd had this conversation with the governor, and I got
6 the impression from Chairman Hendrie that, although a copy
7 of this was sent to his office, somehow the press had
8 picked it up before he had become aware of it. Perhaps
9 he was in here on the President's Commission, I just don't
10 know, but apparently he didn't know about it until it had
11 already broken in the press.

12 But Bob can tell you about the conversation.

13 MR. RYAN: Yes. Later that afternoon -- which
14 would have been --

15 COMMISSIONER KENNEDY: Now this is what date?

16 MR. RYAN: The 13th. June 13th, Wednesday afternoon
17 last, Dick Cunningham and I went down to the Presidential
18 Commission's offices at 2121 M Street, and we met with
19 Dale Pontias, who is the executive assistant to Governor
20 Babbitt, and Governor Babbitt, for about six hours. It
21 lasted six hours because the Governor was in and out
22 because he had Commission business going on, and meetings
23 going on.

24 But we recited what our understanding of the
25 case was. And the Governor agreed with our assessment of the

1 matter. And while we were there, and in our presence, he
2 called Mr. Peter Biehl, B-i-e-h-l, who is the president of
3 American Atomics Corporation.

4 COMMISSIONER KENNEDY: He also is a member of the
5 Atomic Energy Commission.

6 MR. RYAN: No, I don't think he was. Mr. Harry
7 Dooley was a former member of the Atomic, and he is no
8 longer on the Atomic Energy Commission, but he was the vice
9 president of American Atomics Corporation.

10 That's another problem which threads its way
11 through this transaction.

12 COMMISSIONER GILINSKY: Was he on the commission
13 while he was acting as vice president of the company?

14 MR. RYAN: Yes, he was. Yes, he was. As a matter
15 of fact, the Tucson Citizen reports that he accompanied
16 inspectors from the Atomic Energy Commission on inspections
17 of a facility at which he was a vice president while he was
18 serving on the Atomic Energy Commission.

19 There is also a recount in there of Mr. Don Gilbert's
20 problem, and the fact that -- well, let me read it to you:

21 "Mr. Donald Gilbert has been under criticism for
22 personal and professional reasons, and he himself was said" --

23 COMMISSIONER AHEARNE: Bob?

24 MR. RYAN: Yes?

25 COMMISSIONER AHEARNE: I'm not sure if reading a

1 newspaper article is really --

2 MR. RYAN: Okay.

3 COMMISSIONER KENNEDY: I wouldn't mind hearing it.
4 if we have time.

5 COMMISSIONER AHEARNE: Well, are we vouching for the
6 accuracy of the article?

7 COMMISSIONER GILINSKY: He's reading a newspaper
8 article.

9 MR. RYAN: I'm reading a newspaper article. I
10 won't read it if you don't want, but the point that is made
11 in here is that --

12 COMMISSIONER KENNEDY: You can read it, as far as
13 I'm concerned.

14 MR. RYAN: All right --

15 COMMISSIONER GILINSKY: I think we all understand --

16 MR. RYAN: -- may it please the Commission:

17 "Donald C. Gilbert has been under criticism for
18 personal and professional reasons, and he himself said that
19 after 12 years he has become ineffective. He felt the
20 Nuclear Regulatory Commission is breathing down his neck
21 on uranium mine licensing procedures. He admitted that he
22 held the August inspection report on his desk until he
23 resigned." He resigned from --

24 COMMISSIONER GILINSKY: And this is from an article
25 in?

1 MR. RYAN: This is an article in the Arizona Daily
2 Star, Saturday, June 16th, 1979.

3 Let me get back to my point. My point is that
4 part of the problem -- which I think is pretty well
5 recognized -- is that the Atomic Energy Commission of the
6 State of Arizona has two responsibilities: one regulatory,
7 and one promotional. And it has had those responsibilities
8 since the time of its inception, and it is a problem, and I
9 don't think there's any way we can get away from it.

10 At any rate, Governor Babbitt called the
11 president of the American Atomics Corporation about 5:30 or
12 6:00 o'clock our time on Wednesday the 13th, and said that
13 he felt that the plant should voluntarily close down
14 pending a hearing which was scheduled for Saturday, June
15 16th.

16 He felt that it was a continuing problem to remain
17 open, even if it worked at a lesser schedule than it had
18 been working heretofore, and he said to Mr. Biehl that he
19 felt so strongly about this that if the company did not
20 voluntarily close it down, he was prepared to look to his
21 emergency powers as Governor, and also he would look to the
22 question of whether he could renounce the Agreement State
23 program with the NRC, and have the Agreement State program
24 revert to NRC supervision, at which point he was confident
25 that NRC would immediately close the plant down.

282 134

1 He asked for our assistance in testifying before
2 the Arizona Atomic Energy Commission on the 16th, and I
3 had indicated that Mr. Kerr had planned to go out there for
4 sometime, and Mr. Cunningham indicated that he would be
5 happy to go out. In fact, he did go out on Friday, the
6 15th.

7 He appeared at the hearing on the 16th and
8 testified, as I say, for approximately five hours.

9 COMMISSIONER GILINSKY: Can I just ask you, can
10 a governor terminate an agreement?

11 MR. SHAPAR: Not without our approval, in effect.
12 The relevant provision is one sentence in the Atomic Energy
13 Act, 274(j), and it reads as follows:

14 "The Commission, upon its own initiative, after
15 reasonable notice and opportunity for hearing to the state
16 with which an agreement under subsection (b) has become
17 effective, or upon the request of the governor of such
18 state, may terminate or suspend all or part of its agreement
19 with the state and reassert the licensing and regulatory
20 authority vested in it under the Act, if the Commission finds
21 that (1) such termination or suspension is required to
22 protection the public health and safety;" and another reason.

23 COMMISSIONER AHEARNE: So it's entirely possible
24 that he could request a termination of that portion of the
25 agreement that covers that.

1 MR. SHAPAR: Yes, and the ability to terminate
2 a portion of the agreement was due to a recent amendment,
3 the Uranium Mills Tailing Control Act. Before that, it
4 was just the whole agreement.

5 MR. RYAN: Okay, I also should point out that the
6 Commission addressed this question in the proposed agreement
7 with the State of Michigan, where the stumbling block to --
8 recently -- where the stumbling block to an Agreement
9 State agreement with Michigan had to do with the mutuality
10 of the termination provisions. And we've written language
11 which the Governor of Michigan has subsequently found
12 acceptable, whereby we could accept a determination that the
13 State of Michigan was no longer interested in the program,
14 and make a rapid-fire determination that that would -- if
15 he took the people off, it would therefore not be protective
16 of the public interest, and terminate fairly quickly.

17 At any rate --

18 COMMISSIONER BRADFORD: Go ahead, Bob, if you
19 were going to. I wanted to come back --

20 MR. RYAN: I do, too. Let me make one pivotal
21 point here.

22 On Friday night, June 15th, the Atomic Energy
23 Commission of the State of Arizona closed the plant, using
24 its emergency powers. I don't know --

25 COMMISSIONER BRADFORD: You mean the president of

282 136

1 the company declined to close it even after the Governor
2 spoke to him?

3 MR. RYAN: That is my understanding. The
4 president of the plant declined to close it. We left it --

5 COMMISSIONER KENNEDY: Even though he was aware
6 of this data? He was aware of the numbers that we've been
7 talking about?

8 MR. RYAN: Yes, indeed.

9 MR. DIRCKS: Well, not only that, but after the
10 Governor closed it, they're in court today. That's where
11 Cunningham is still. He's been requested by the Governor
12 to appear in court to assist the state in keeping the plant
13 shut down, and Cunningham just talked to me, and the
14 Governor and the State has presented its case, and the judge
15 has now decided that he's going to consider -- may give a
16 decision this afternoon whether he's going to allow the
17 plant to shut down, or whether he's going to allow the
18 plant to open up again.

19 COMMISSIONER AHEARNE: The plant then is contesting
20 the shutdown?

21 MR. DIRCKS: Yes.

22 MR. KERR: Yes, as Bob said, Saturday morning,
23 the hearing was to be at 8:00 o'clock Arizona time this
24 morning. The hearing itself is to resume tomorrow. It
25 recessed Saturday evening, and to resume tomorrow, the

1 hearing.

2 COMMISSIONER BRADFORD: If I swam in a swimming
3 pool with 417,000 picocuries per liter for half an hour, of
4 tritium, what kind of a dose would I get?

5 MR. RYAN: Well, we have the urine sample of the
6 lady who swims regularly in this swimming pool, and I think
7 it was somewhere in the neighborhood of 60- or 70,000
8 picocuries per liter urine.

9 MR. SHAPAR: And the drinking water standard is
10 20,000?

11 MR. RYAN: Yes.

12 COMMISSIONER BRADFORD: But presumably -- now
13 people don't usually drink all that much?

14 MR. RYAN: No, they don't. But in tritiated water,
15 it penetrates the tissue.

16 COMMISSIONER BRADFORD: Right. But I was
17 wondering whether that's the best measure of the dose?

18 MR. KERR: Commissioner, be sure you understand,
19 now, if you're drinking that -- let's say you're drinking
20 this material, to give you those doses I talked about before,
21 you have to do it all year long at a normal rate of intake
22 of like 2 liters a day.

23 COMMISSIONER BRADFORD: Which doses?

24 MR. KERR: I mentioned 500 millirem. If you --

25 COMMISSIONER BRADFORD: But you didn't mention it

1 in conjunction with --

2 MR. KERR: Not the 400,000. If you drink the
3 EPA -- I'm sorry, if you drink --

4 COMMISSIONER KENNEDY: If you drink water with
5 20,000 curies, picocuries --

6 MR. KERR: Just a minute. If we drink water that
7 is at the MPC in NRC's regulations for off-site --

8 COMMISSIONER KENNEDY: Which is? 20,000 picocuries?

9 MR. KERR: No, sir. It is 3 million.

10 COMMISSIONER KENNEDY: 3 million?

11 MR. KERR: 3 million is NRC's MPC, much greater
12 than the EPA drinking water standard, which affects water
13 you sell to the public, and so on.

14 COMMISSIONER BRADFORD: Why do we have a standard
15 that's orders of magnitude bigger than EPA's?

16 MR. KERR: The indication, as I understand, the
17 theory behind the NRC regulation is that you do not really
18 expect to drink water coming out of effluent. You really
19 anticipate there will be large dilutions and processing
20 before it gets to people to drink.

21 It is conceivable that an individual might drink
22 it --

23 COMMISSIONER AHEARNE: NRC's standard relates to a
24 prolonged discharge from the plant.

25 MR. KERR: Yes, sir, to unrestricted areas. But

1 in theory, you could drink 3 million picocuries per liter of
2 water, and your normal intake is something like 2 liters of
3 water a day. And you would have to take in water at that
4 rate for all 365 days a year to result in the 500 millirem.

5 COMMISSIONER GILINSKY: At the NRC MPC.

6 MR. KERR: That's correct.

7 COMMISSIONER KENNEDY: That's 3 million?

8 MR. KERR: Yes, sir.

9 MR. RYAN: By the way, this is basically --

10 COMMISSIONER KENNEDY: So now we're back to where --
11 to help me -- back to where Mr. Bradford was. We're back in
12 that swimming pool.

13 So the person swims in the swimming pool a half an
14 hour a day -- in Arizona you can do that all year around,
15 certainly in Tucson -- or an hour, some period of time, pick
16 one, all day long, every day, 365 days a year. What total
17 dose is he going to get?

18 MR. KERR: If you -- if it resulted in taking in
19 the equivalent of the EPA drinking water standard, 20,000
20 picocuries per liter, you will get 4 millirem per year.
21 That's what the numbers related to dose in the EPA drinking
22 water standard is, 4 millirem per year from that 20,000
23 picocuries.

24 COMMISSIONER AHEARNE: That's 2 parts a day,
25 every day.

1 MR. KERR: That's correct.

2 COMMISSIONER BRADFORD: But that's if you drink
3 it.

4 MR. KERR: Yes, but you see, you can -- if you
5 swim, you know, you can get an exchange through the skin,
6 you understand. You may ingest some by drinking it, you
7 know, and so on, and I can't tell you how much might go
8 which way.

9 COMMISSIONER KENNEDY: But it would doubtless not
10 be more than drinking it.

11 MR. KERR: No, that's right.

12 COMMISSIONER AHEARNE: Let me ask, I don't know,
13 Bill, or your fellow there, I am now confused as to what it
14 is about these numbers that violate your standards.

15 MR. DIRCKS: In this particular plant? Well, I
16 think the point that Dick was talking to me about just on
17 the phone, the one point where we think they are in excess
18 of our standards is in the worker exposure.

19 We think, from what we gather from Dick's
20 conversation with me, they've exceeded their worker exposure
21 limits inside that plant. That in itself is enough to --

22 COMMISSIONER AHEARNE: Inside the plant.

23 MR. KERR: The maximum allowable dose.

24 COMMISSIONER AHEARNE: But the numbers that we've
25 been hearing in the water, the swimming pool, et cetera, that

1 doesn't sound like -- putting the more important question
2 is whether it's serious, but at least as far as our
3 regulations are concerned, it doesn't sound like it's --

4 COMMISSIONER KENNEDY: But it was serious enough
5 for the health department of Pima County to shut down the cake
6 manufacturer. So I'm not sure just how serious it is.

7 COMMISSIONER AHEARNE: I don't know. I was asking
8 Bill the question.

9 MR. SHAPAR: You're talking about the standards in
10 Part 20. And I don't think we have a handle on that point.

11 MR. KERR: Let me try to characterize why I see,
12 the basis for our recommendation that they should shut down.
13 We have a company releasing very large quantities of
14 tritium into the atmosphere, and they were cited for the
15 excessive releases.

16 We have what appear to be very large losses.
17 You have various water samples that are certainly elevated
18 with tritium, some of them above EPA drinking water standards,
19 others -- using that as a reference point -- like the swimming
20 pool that are much above. In cake, loose water, they squeeze
21 it, that's why you get the loose water, as I understand
22 their analysis, and take the free water. A backyard pond,
23 for example, goldfish pond, tap water in the food plant
24 below the EPA drinking water standards, but elevated;
25 urine and resins -- I've got a few points here I'd like to

1 focus on.

2 COMMISSIONER KENNEDY: By all means. Go ahead.

3 MR. KERR: The food is used in the school lunch
4 program. It was 40,000 lunches a day. The workers in the
5 food plant had detectable tritium in the urine, although much
6 lower than what you would expect for workers.

7 You don't know --

8 COMMISSIONER GILINSKY: The radiation workers?

9 MR. KERR: Yes, for radiation workers, because
10 they're not radiation workers. They're in the food plant.

11 COMMISSIONER GILINSKY: Which they didn't think
12 they were.

13 MR. KERR: That's right, they're not.

14 So you have a mechanism of transfer of the tritium
15 to water and the exact mechanism is not known. You have the
16 mechanism exposures of the people in the food plant. They
17 may get it from swimming. They may get it from drinking
18 the tap water in the plant. You don't know.

19 Therefore, it seems to me you've got the exposure
20 pathways that are not known. You've got tritium in the food
21 chain. You have a susceptible -- more susceptible population
22 group involved -- children in some cases, in a fairly large
23 cases, there are others -- and it's not consistent with an
24 ALARA concept which -- now I recognize there are no ALARA
25 numbers established for this kind, but it's always been the

1 philosophy of the Radiation Protection people that you keep
2 exposures, you know, if you can --

3 MR. SHAPAR: Doesn't Part 20 specifically say,
4 though, licensees should keep exposures as low as
5 practicable, below the limits?

6 MR. KERR: But there's no numbers on it. That's
7 right. And the Arizona regulations are quite similar.

8 Therefore, it seemed to me that the prudent thing
9 to do is to more fully assess the total impact on the
10 community and so forth, that you -- you know, if you improve
11 operating practices, or whatever may be necessary, but that
12 is the prudent thing to do.

13 COMMISSIONER KENNEDY: Wayne, I think you've
14 answered one question that's been troubling me. We do not
15 know what accounts for those extremely high levels in that
16 water. We don't know how it's getting there, whether it's
17 fallout -- Is that even possible?

18 MR. KERR: Yes, it's definitely possible that it's
19 coming from the air. Now I did make some inquiries --

20 COMMISSIONER AHEARNE: And how is it getting into
21 the water that's used --

22 MR. KERR: Well, it's an unknown. I tell you, one
23 question I did ask of the EPA people and others about,
24 because -- to get rid of the possibility, is there an
25 underground pathway?

1 Tucson relies heavily on deep wells. I understand
2 the city water engineer, whatever his title might be, in
3 Tucson said that the water is very, very old water. That
4 is, it's been down there a long time, like 5000 years,
5 and it does not recharge readily. That would seem that that
6 is probably not a pathway. But it still then leaves the
7 question.

8 COMMISSIONER AHEARNE: Does that food plant next to
9 them use a well for its water?

10 MR. KERR: Well, the wells feed a city water
11 supply around the city --

12 COMMISSIONER AHEARNE: Okay, so it's a city water
13 supply.

14 MR. KERR: Yes.

15 So, you know, I think that that may have been
16 eliminated, as far as underground to the well, but it still
17 raises the question: Is it all coming just from the effluent,
18 the deposits to the swimming pool? Or it goes in air intakes
19 into the food plant?

20 COMMISSIONER KENNEDY: That wouldn't get it into
21 the plant unless it's --

22 MR. KERR: Well, into ventilation into the food
23 plant, see, it could come in there.

24 But, again, the workers may be going home and
25 swimming --

1 COMMISSIONER KENNEDY: But how does that get it
2 into the water in the food plant?

3 MR. KERR: I don't know. See, we don't --

4 COMMISSIONER GILINSKY: Does that pretty well
5 bring us up to date?

6 MR. KERR: I think that covers most of it.

7 COMMISSIONER GILINSKY: I have a question, then,
8 which is: What did we do in qualifying or checking the
9 qualifications of Arizona in carrying out its responsibilities
10 under the Agreement program?

11 MR. KERR: Well, we, you know, have in all cases
12 reviewed all these programs annually, with rare exceptions.

13 COMMISSIONER GILINSKY: Well, let me sharpen that
14 up a little bit.

15 Bob referred to the Arizona Commission as having
16 responsibilities both of a regulatory nature and other
17 responsibilities, as well. And that posing a problem.

18 Now that situation has been there for some time.
19 Did that have any effect on our decisions in qualifying them?

20 MR. KERR: Not --

21 MR. RYAN: It was the Atomic Energy Commission
22 which accepted the Agreement State status in 1967, and I
23 think you could make the argument that the Atomic Energy
24 Commission didn't --

25 (Laughter.)

1 MR. RYAN: We really don't look to the setup, the
2 organizational setup of an Agreement State, and that is a
3 matter which I think is properly within the purview of the
4 state.

5 What I think we do look to, and should look to,
6 is whether the program is protective of the public health
7 and safety, and that is a matter which we inquire into in
8 our annual reviews of the program.

9 I should point out to you, by the way, that I've
10 had a recent petition from the Environmental Policy Center
11 suggesting that the Arizona program -- by the way, this
12 antedates the June 1 transaction -- suggesting that the
13 Arizona Atomic Energy Commission and Agreement State Program
14 is not protective of the public health and safety, and
15 therefore ought to be revoked.

16 We have made no determination on the merits of
17 that issue. It is premature, it seems to me, for us to
18 inquire into that question until we have the ultimate dispo-
19 sition of this matter by the Atomic Energy Commission.

20 COMMISSIONER GILINSKY: When was the last time we
21 passed on their qualifications?

22 MR. KERR: I think at the staff level we reviewed
23 them in January of this year, and we have some comments to
24 them, but we expressed the staff opinion that, you know,
25 there's where we were at, but we did have comments.

1 COMMISSIONER AHEARNE: Is the paper in preparation
2 now?

3 MR. KERR: Yes, under preparation. The paper that
4 comes to the Commission is always behind because it covers
5 the calendar year period, and it's not up yet.

6 COMMISSIONER GILINSKY: Could you just give me some
7 indication of what you do when you go through this? Is there
8 a yearly assessment?

9 MR. KERR: Yes, it's been more or less yearly, and
10 in an occasional state where there's been a problem like we
11 had with Washington a year and a half ago, we went back a
12 few months later. We have another one this year, which we'll
13 go back on certain limited aspects of the program, not all
14 aspects, in another couple of months, probably, before we
15 make a final staff position.

16 COMMISSIONER GILINSKY: But what does it involve?
17 Is there a site visit? Do you examine the records?

18 MR. KERR: Yes. We go, and we review them in
19 accordance with a guide that covers six major areas. How
20 they are organized -- that is, structure within their
21 program, who does their training, does the material, and how
22 many people, the kinds and numbers of people, some of their
23 administrative procedures set up, the status of their
24 regulation, and then heavy on licensing and compliance. And
25 we do review a number of license files. Granted, we don't

1 have the time to make, you know, an indepth review like
2 we're doing, you know, if we're doing our own, but we look
3 to see that they're hitting the major elements of concern,
4 inspection and enforcement action, and we go with inspectors
5 in most states yearly, in some small states we do not go
6 yearly.

7 If we've gone with the key guy that's doing
8 inspections last year and he seemed to be doing okay, we
9 probably will skip a year in between.

10 But it does call for looking at a number of
11 license files, and inspection files, and accompanying them
12 on inspections.

13 COMMISSIONER GILINSKY: Do these assessments result
14 in some required actions on the part of the states,
15 sometimes?

16 MR. KERR: Well, Commissioner, as you probably
17 know, and I'll refresh you, that our powers are largely
18 persuasive with the state. It's that kind of an arrangement.
19 We expect that they're fellow regulators trying to do a
20 decent job, we think, and we give them comments that we
21 think they can benefit from from our experience, and what
22 we see.

23 And we sent them a couple of letters, one from
24 the Program Director, and one in this case to Chairman Willis
25 of the Commission, asking -- or telling them our recommendations

282 149

1 and we ask them to give us some reply to it.

2 MR. RYAN: States usually take these suggestions
3 very seriously.

4 COMMISSIONER KENNEDY: Do you deal with the
5 governor in these matters? Or with --

6 MR. RYAN: No, we usually deal with the department
7 head in the -- that, by design, anyway, on the theory that
8 if we don't have any immediate response to our suggestions,
9 then the next order is to appeal to the governor.

10 We had that situation a year and a half ago in
11 Washington State, where we made a determination that the
12 program, as operated at the time of our visit, was not
13 adequate to protect public health and safety.

14 We brought this to the attention of the governor,
15 and forthwith the freeze was lifted on hiring, and eight
16 new people appeared. That was basically the problem.

17 COMMISSIONER GILINSKY: When was this?

18 MR. RYAN: This was -- Help me, Wayne.

19 MR. KERR: The review was November of '77, and they
20 started taking action within a week or so to get additional
21 positions and staff up, and we rereviewed Washington in
22 March of '77 -- '78, I'm sorry, to follow up. And in that
23 case, Mr. Ryan and I also went out and met with them almost
24 at the same time, and they had improved dramatically in that
25 case.

1 COMMISSIONER AHEARNE: Did you see any problems in
2 Arizona, when you reviewed them, that were significant?

3 MR. KERR: Let me see if I can find what we
4 commented on, Commissioner.

5 (Pause.)

6 To the chairman of the commission in January --
7 well, the letter went out February 1st, this year, we
8 commented to the chairman that they had improved their
9 staffing level, but that we -- let's see -- they were
10 improved on the inspection backlog. The previous year they'd
11 had quite an inspection backlog. They have improved that.

12 We did say that we had some comments on the
13 licensing area which were addressed to the program director.
14 That was Mr. Gilbert at the time. And we laid out some
15 comments to him.

16 We did stress to Dr. Willis, though, that he ought
17 to consider what the impact was going to be on processing
18 uranium mill applications, because at that time they had a
19 pending application, which at the moment is kind of in
20 abeyance, but it pointed out to them the considerable
21 impact that that does have on a state program.

22 COMMISSIONER AHEARNE: Nothing that would be
23 related to this?

24 MR. KERR: Nothing related to this one. We did
25 review an amendment to the license. During the file review,

1 I don't know the particulars on that review, but I think, if
2 I remember right, Commissioner, it had to do -- there was a
3 comment developed about some of the dose assessments from
4 the product, the manufactured product, which was an area
5 that we highlighted to.

6 COMMISSIONER GILINSKY: I think Bill wanted to
7 say something.

8 MR. DIRCKS: I just wanted to clarify a point that
9 Commissioner Ahearne asked me a question about, Part 20,
10 and how things would be different, and I mentioned worker
11 exposure.

12 I think I should make clear that Dick Cunningham
13 is down in Arizona. He's testifying in support of the
14 Governor's order to shut the plant down, not only on the
15 grounds of worker exposure, but on the ground that getting
16 those limits down to an acceptable level, as Howard pointed
17 out, under the regulation; and thirdly, if we had a facility
18 that was losing out the stack 20 to 25 percent of its
19 curie inventory, we would ask the plant to close down,
20 because there's something wrong in there that we'd want to
21 take a look at.

22 COMMISSIONER AHEARNE: Yes. I was trying to,
23 you know, pin down exactly what it is that we would be
24 taking action on. And as far as I can tell, given the numbers
25 that have been talked about, since we haven't yet gotten to

1 any measurement of worker exposure, so far the only thing
2 that one would say really looks bad is the huge amount of
3 loss, and the puzzlement about how this stuff is then
4 showing up in the system.

5 MR. DIRCKS: That's right. And I think this is
6 what --

7 COMMISSIONER AHEARNE: But as far as the basic
8 numbers are concerned, I haven't yet --

9 MR. DIRCKS: Well, the basic numbers are what's
10 given in the Part 20, and those are high numbers, and I think
11 that's why we've been, in our own licensing practices,
12 working on the ALARA principle to get them down as low as
13 is achievable.

14 I think the point is that, on this plant, we would,
15 because those losses are so high, there's something going on
16 in that plant that we'd want to take a look at. And the only
17 way to take a look at it is to stop the operations.

18 COMMISSIONER AHEARNE: I'm just trying to draw a
19 distinction though between that, which I fully understand,
20 and between saying that here is a number which, you know,
21 something like the 417,000 picocuries per liter in the
22 swimming pool.

23 MR. DIRCKS: Yes.

24 COMMISSIONER KENNEDY: Which is a number which in
25 itself is evidence of danger to the public health and safety.

1 COMMISSIONER AHEARNE: Well, it's a number which
2 indicates there's stuff getting into the water. But since
3 it's so far below our limit --

4 MR. DIRCKS: The limit in the standard, but not
5 the --

6 COMMISSIONER AHEARNE: If our limit -- you know,
7 our limit may be wrong. But at least as far as --

8 MR. DIRCKS: Well, I think the Part 20 is a
9 regulation that has been looked at. When did it come into
10 effect? 1957 or something like that? It was changed in
11 '61. I don't think it's been revised since then. So I
12 think it's on the work plan of the Standards office. It's
13 a long way off.

14 MR. SHAPAR: Of course it was based on the Federal
15 Radiation Council guidance, and the ICRP and the NCRP.

16 MR. DIRCKS: And a lot of it is tied up with the
17 new Clean Air Act Amendments. They're waiting for that to
18 sort out.

19 COMMISSIONER BRADFORD: Has anybody calculated the
20 population dose, if in fact they lost 248,000 curies a year?

21 MR. KERR: No, sir.

22 COMMISSIONER BRADFORD: Can that be done?

23 MR. KERR: After considerable work, I think it can,
24 yes.

25 COMMISSIONER AHEARNE: How long -- Now you mentioned

1 earlier that they have to report to Oak Ridge.

2 MR. KERR: Yes, sir.

3 COMMISSIONER AHEARNE: So do we have a record
4 going back now several years of this kind of loss reported?

5 MR. KERR: I don't think so. The first thing is,
6 the expanded tritium operation -- this company has been in
7 business for some time. They originally started heavy in
8 krypton R&D, then they moved into the tritium area, and it
9 started to increase in about '75.

10 As I understand, the big releases are primarily
11 late '77 and perhaps through '78 and now '79.

12 The reporting requirement to Oak Ridge is in
13 10 CFR Part 150. I'm not sure that very much is done with
14 those reports, currently. It's an NRC requirement on state
15 licensees, and it was picked up from that. That was the
16 first indication of the big losses. The state has to have
17 a copy of it.

18 COMMISSIONER AHEARNE: They were reporting, to
19 meet our requirement. What do we do with the reports once
20 they get to Oak Ridge?

21 MR. KERR: It's my understanding that not much has
22 been done with them.

23 COMMISSIONER AHEARNE: Is that equivalent to
24 "nothing"?

25 MR. KERR: Probably.

1 MR. DIRCKS: I think that's a reporting requirement
2 that DOE has asked us to levy on our licensees. I think
3 it's more related to safeguards requirements than it is to
4 health and safety.

5 MR. SHAPAR: Well, it's got to be related to
6 safeguards, because we've turned over authority on health
7 and safety to the states. So it is a safeguards requirement.

8 COMMISSIONER AHEARNE: I see.

9 COMMISSIONER KENNEDY: Is this company doing
10 anything else?

11 MR. KERR: Yes, sir, Commissioner. They do have
12 other things authorized. The state's order affects
13 primarily this heavy tritium operation. They run a waste
14 pickup operation, if you know what I mean. They collect
15 packaged waste, and so forth, and then after they get
16 truckloads together, send it on elsewhere.

17 They do some R&D work. They still do some krypton
18 work. And, you know, there's an assortment of other smaller
19 quantities of material on this license, and perhaps some
20 other.

21 The only part that's been affected by the order
22 is the tritium processing operation.

23 MR. RYAN: Well, I should say, in my judgment, the
24 state has taken the proper action. I think Bill spoke of
25 the Governor's order closing it down. It's my understanding

1 that it was the Atomic Energy Commission, as distinguished
2 from the Governor, although the Governor did recommend the
3 closedown to the Atomic Energy Commission when he returned
4 to Arizona on Friday of last week.

5 The proper steps have been taken, and I think we
6 can sort out the pathway in due course, and at the same time,
7 not have to worry about the continuing contamination of food
8 and foodstuffs in the plants which are operating adjacent
9 to this facility.

10 COMMISSIONER GILINSKY: Let's see. I don't have
11 any questions on this subject for the moment.

12 I would like to hear what you --

13 MR. KERR: Would you like copies of the order?
14 I've brought some copies of the Arizona order, and the charge
15 that was presented at the hearing.

16 COMMISSIONER AHEARNE: I'd like to ask Bill some
17 more questions.

18 COMMISSIONER GILINSKY: Sure.

19 COMMISSIONER AHEARNE: Bill, you mentioned worker
20 exposure. Is that based upon some data? Or is it based
21 upon this very large loss rate?

22 MR. DIRCKS: I just got that over the phone from
23 Cunningham, and I assume it's some data that he's picked
24 up down there.

25 MR. KERR: Well, I have knowledge of it, yes. I

282 157

1 have in the document that the state had that they know that
2 an overexposure shown by concentrations in the urine of a
3 worker. It's my understanding that since that report was
4 written there may be another one that is of pretty substantial
5 size. There are some others that appear to go over, on a
6 one-time basis, for a very short time, and they take them
7 off the work -- you know, for a while, and then they put
8 them back to work.

9 There are some occupational exposures. Now in
10 the statement of charges that was presented at the hearing
11 by the State on Saturday, however, they withdrew -- the
12 attorneys did -- the charges on the overexposures, because
13 the individual involved is in litigation with the company.
14 So they withdrew them from the State -- under their notice
15 of hearing, the charges on the grounds that they were
16 presented to the commission.

17 COMMISSIONER KENNEDY: In litigation with the
18 company in what regard?

19 MR. KERR: Well, I guess he's filing a suit.

20 MR. DIRCKS: He's suing.

21 MR. KERR: I think he's suing the company.

22 MR. DIRCKS: He's suing for damages.

23 MR. KERR: He's a former employee, as I understand.

24 COMMISSIONER AHEARNE: Bill, do we have any

25 measurement around the other -- the New York and Pennsylvania

1 plants, ground water, anything like that?

2 MR. DIRCKS: In the environmental samples? I'll
3 have to ask Randy or Nat. that question. This is Randy
4 Miller who's the branch chief.

5 MR. BASSIN: Well, I can tell you because I was
6 just there. When we got up there, U.S. Radium had heard
7 about the situation at American Atomics, and before we could
8 ask them, they volunteered the fact that they were going
9 to go out and being doing environmental sampling.

10 And I understand that, as a followup, Region 1 is
11 going to be making some independent measurements.

12 COMMISSIONER AHEARNE: I think your response is
13 we don't have any?

14 MR. BASSIN: No, right now we have no measurements.
15 It was not a requirement.

16 COMMISSIONER AHEARNE: How about around the New
17 York?

18 MR. RYAN: New York is an Agreement State.

19 MR. BASSIN: New York is an Agreement State.

20 MR. RYAN: And I've talked to Sherwood Davies,
21 who heads the Radiation program. I guess it was about two
22 weeks ago. It was when this matter was coming up. But they
23 are worried in New York about the tritium problem, and he
24 called me to ask me whether NRC could supply a representative
25 to a task force, an ad hoc task force looking at this problem,

1 and reporting back to the director of the state's
2 Commission of Health.

3 And our answer was: Yes, we would supply someone,
4 and as a matter of fact I got a letter from the Director of
5 Health today telling us that the meeting was going to be on
6 the 25th and asking who it will be.

7 MR. KERR: Let me add, they do have numbers.
8 They have had some concentration in the Sawmill River, and
9 we had sent up a notice on that company --

10 COMMISSIONER AHEARNE: What kind of concentration?

11 MR. KERR: Let me look up my note, if I may, on
12 which one it is.

13 (Pause.)

14 I must say, they're, I think, at an earlier stage
15 of some of their investigation -- although it started sometime
16 ago. March 2nd we sent up a notice, 7906, about elevated
17 tritium in the stream samples. One sample contained tritium
18 at a level of right at the MPC for off-site water --

19 COMMISSIONER AHEARNE: Which is?

20 MR. KERR: Which, in a stream run by the plant --

21 COMMISSIONER AHEARNE: You mean the 3 million?

22 MR. KERR: 10^3 microcuries, yes, it would be
23 3 times 10, that's right. That's right, 3 million.

24 Other samples contained lesser concentrations,
25 but elevated over those expected. I might add, in New York

1 it gets complicated. You've got more than one agency
2 involved. The New York Department of Labor, which licenses
3 them for in-house, on Thursday, I understand, instructed
4 the company to cut off receipt of bulk shipments of gaseous
5 tritium until they can further evaluate handling procedures
6 in that plant. Because they have had recent requests for
7 increased production levels, and they are reassessing some
8 of their --

9 COMMISSIONER AHEARNE: So the New York number, the
10 latest that you have is at the 3 million picocuries per liter?
11 Of course that's in the river.

12 MR. KERR: That's the only one, Commissioner, I
13 can confidently say --

14 COMMISSIONER AHEARNE: You don't have any measure-
15 ments around the plant?

16 MR. KERR: They do have. They have some others,
17 but I must say I'm not that current on it because they're
18 in the process of working with this company on, you know,
19 where they stand.

20 COMMISSIONER AHEARNE: My last question: Bob, in
21 talking with EPA, did EPA mention that they had given you
22 these measurements?

23 MR. RYAN: No, the EPA had given the measurements
24 to the Arizona officials, and they passed them on to us.

25 COMMISSIONER AHEARNE: Do you know whether EPA

1 reached a -- had a position on the significance of the
2 measurements?

3 MR. RYAN: I'll turn that over to Wayne.
4 Alan Moghissi from EPA was out there. I don't know whether
5 he actually testified.

6 MR. KERR: Alan had not appeared yet. In fact,
7 I'm not sure his deposition has been completed. He was
8 there certainly on Saturday for the hearing, and will be
9 there in the one that resumes tomorrow.

10 He is going to talk about: What do the numbers
11 mean? What do they mean in terms of doses for people, and
12 things like that? He is a rather noted tritium expert in
13 this country.

14 I do not know what his conclusion might be in
15 terms of overall significance.

16 MR. RYAN: I have some hearsay on that, because
17 while I was with Governor Babbitt last Wednesday, he talked
18 to the attorney from the Attorney General's office who will
19 be handling the matter, a fellow by the name of "Silver,"
20 and Silver told Babbitt, Governor Babbitt, that Alan Moghissi
21 will testify that there is a serious health problem, and a
22 problem of great immediacy, by virtue of these high readings
23 off-site.

24 COMMISSIONER KENNEDY: He will testify?

25 MR. RYAN: That's what Silver -- as I say, it's

282 162

1 thirdhand. Silver's conversation with Moghissi relayed to
2 Governor Babbitt.

3 MR. SHAPAR: Of course that's probably one of the
4 main things the court will be determining maybe this afternoon
5 in its decision.

6 MR. RYAN: That's right.

7 MR. KERR: But the court was meeting before further
8 testimony.

9 COMMISSIONER GILINSKY: Does that do it?

10 We've also been invited to testify next Monday
11 before Mr. Udall on this subject, and the State Agreement
12 programs in general.

13 MR. RYAN: Right.

14 COMMISSIONER GILINSKY: I wonder if you could just
15 briefly tell us your plans for complying with that request.

16 MR. RYAN: There are three governors who will be
17 testifying, to my knowledge, Commissioner -- the Governor of
18 Kentucky, the Governor of North Carolina, and the Governor of
19 Arizona --

20 MR. GOSSICK: Well, they, or their representatives.
21 I'm sure that the governors --

22 MR. RYAN: I had heard that it was the governors
23 who will be testifying. That's the indication I have.

24 COMMISSIONER KENNEDY: The governors were invited.

25 MR. RYAN: Governor Babbitt's in town.

1 At any rate, the subject, I think, was not
2 originally planned for this time by the committee. Some
3 other hearing which they had scheduled has fallen through
4 and they decided to concentrate on this one, and we've given
5 you an outline of what our proposed testimony would look
6 like.

7 COMMISSIONER GILINSKY: And will there be testimony
8 from state programs?

9 MR. GOSSICK: Yes, the intent -- our plan here,
10 unless the Commission decides --

11 COMMISSIONER GILINSKY: And what about NMSS?

12 MR. GOSSICK: Yes, Mr. Dircks will be there, but
13 no prepared testimony. As I understand the subject, it is
14 just covering the state programs.

15 Our plan was to have Bob, and Wayne, and Bill
16 Dircks go down on the 25th.

17 MR. RYAN: I'm sure Mr. Cunningham would like to
18 be there, too.

19 MR. GOSSICK: Yes, with any other staff.

20 COMMISSIONER KENNEDY: If he's back?

21 MR. GOSSICK: Yes, if he's back.

22 COMMISSIONER GILINSKY: Could we see a draft of
23 that testimony?

24 MR. RYAN: Sure. We have one working now. I'm
25 sorry I couldn't bring it over. You'll have it tomorrow.

1 COMMISSIONER GILINSKY: At some early date? Good
2 enough.

3 Who can then comment on it?

4 MR. RYAN: Sure.

5 MR. GOSSICK: Incidentally, that same letter
6 addresses a hearing on Thursday, the 28th. They're getting
7 into, again, state-related matters having to do with the
8 waste disposal. And in talking with Bill Dircks, it seems
9 to me that it's probably more appropriate to have Bill as a
10 witness on that with Bob as backup --

11 COMMISSIONER GILINSKY: That is which one?

12 MR. GOSSICK: On Thursday, on the hearing where
13 they're going to get into the repository waste -- repository
14 siting and licensing, and the role of public participation
15 mechanisms for state participation and so forth.

16 COMMISSIONER GILINSKY: What is this Item B,
17 "License Issued to Finley C. Watts"?

18 MR. KERR: Yes, that's right, I wrote that on
19 there. When I originally got the oral notice about this,
20 I was asked -- there were three problem cases, Yankee
21 Flats, American Atomics, and Tennessee Watch, which was
22 referred to in Mr. Udall's attachment to his letter about a
23 Wilkesboro, North Carolina, low-level burial ground, and it's
24 not a low-level burial ground, it is again a waste-collection
25 type agency, and it had generated some citizen concerns down

1 there.

2 COMMISSIONER AHEARNE: That's Tennessee Watch?

3 MR. KERR: Yes, Tennessee Watch was the person the
4 license was issued to.

5 MR. RYAN: Here's the question: "What, if any,
6 has been the Commission's involvement in the situation
7 involving the siting and licensing of a low-level waste
8 burial ground in North Wilkesboro, North Carolina? To what
9 extent under the Agreement State Program does the Commission
10 require or recommend procedures in states for public
11 participation in siting and licensing activities?"

12 COMMISSIONER GILINSKY: Okay. Well, I think
13 we'll be in a better position to comment on the testimony
14 when we've seen it.

15 COMMISSIONER AHEARNE: What is the stand, at the
16 moment? Has Governor Babbitt followed through any further
17 on this possibility of asking us to take back any of the --

18 MR. RYAN: No, he hasn't. And I take it,
19 Commissioner, that's because the plant is shut down.

20 COMMISSIONER AHEARNE: Have we ever taken back an
21 Agreement State?

22 MR. RYAN: No.

23 COMMISSIONER AHEARNE: Do we have any process laid
24 out to go about making that kind of an action?

25 MR. RYAN: The closest thing we can come to is that

1 statement from the Commission in the Michigan letter about
2 mutuality of termination. I don't think it's a lively
3 possibility, quite frankly.

4 MR. SHAPAR: Except there is one difference now,
5 fairly recent. For the first time we have authority to
6 terminate part of a program. We never had that authority
7 before. No one at least has focused on it up to now.

8 MR. KERR: Let me comment on that. When he says
9 "part of a program," he means a category of material. There
10 are four categories of radioactive materials in the act now.

11 MR. SHAPAR: Yes.

12 MR. KERR: We're not talking an individual
13 license --

14 MR. SHAPAR: There is one other point that is
15 interesting and related. And that is, the significance
16 of these annual redeterminations. It's the basis on which
17 the Department of Labor does not exercise current authority
18 that it has to promulgate regulations. They in effect
19 rely on the annual redeterminations of compatibility and
20 adequacy which the NRC makes.

21 COMMISSIONER GILINSKY: That is something -- I
22 was a little concerned about something that Wayne Kerr said,
23 you were reminding me that we could only persuade states to
24 improve their program, but we are passing here on the
25 adequacy of their program. If it's not adequate -- 282 167

1 MR. SHAPAR: -- we have authority to terminate the
2 program.

3 MR. RYAN: And I assure you that I would recommend
4 such a thing if we were in a position where we found
5 something not adequate to protect the public health and
6 safety.

7 MR. SHAPAR: And even though we enter into the
8 agreement on grounds of both compatibility and adequacy,
9 strangely enough the statute provides authority only --
10 aside from the uranium mill tailings thing -- authority only
11 to terminate on grounds of adequacy and not compatibility.
12 Although the Commission in the past has said that if at any
13 time it felt the state program was not compatible, it would
14 do everything in its power to achieve compatibility, including
15 perhaps seeking legislation.

16 COMMISSIONER KENNEDY: Well, "compatibility" could
17 be one of the aspects of adequacy.

18 MR. SHAPAR: Yes, but they treat it as two separate
19 twin concepts in the statute. And you need both to enter
20 into the agreement, but the only grounds for revocation in
21 context is the adequacy.

22 COMMISSIONER AHEARNE: Well, Bob, let us suppose
23 that, if one looked at the Oak Ridge data, that one found
24 that this plant really had been losing 100,000, 150,000
25 curies a quarter. Would that lead you to the conclusion that

1 perhaps you ought to take a harder look at Arizona, with
2 the possibility of --

3 MR. RYAN: Sure it would.

4 I feel very strongly about the health and safety
5 of these people out there, and that's one of the reasons we
6 sent the telegram and did what we did when we did it.

7 COMMISSIONER KENNEDY: Why don't we get the Oak
8 Ridge data in here, then?

9 MR. RYAN: We can. I guess -- Wayne, you've gotten
10 some it, have you not?

11 MR. KERR: I'm not very familiar with that process.
12 An NRC inspector from Region 5 was with me, a safeguards
13 inspector. I was with him Saturday and Friday night, and
14 he said he is going to, you know, talk to Oak Ridge some
15 about this.

16 I understand they get reports out on certain kinds
17 of materials, special nuclear material data --

18 COMMISSIONER AHEARNE: Sure, I can understand --

19 MR. KERR: And I guess he wasn't sure, you know,
20 what to do with the stuff.

21 COMMISSIONER AHEARNE: What I'm really saying is
22 that it appears that there's a possibility that at least --
23 at least in their inspection of this kind of facility, that
24 the Arizona program really has a serious problem.

25 MR. RYAN: Right.

282 169

1 COMMISSIONER AHEARNE: Which would appear that if
2 we checked the Oak Ridge data and find that it's been existing
3 for a long time, maybe you ought to consider at least
4 revoking --

5 MR. RYAN: I'm prepared to make such a recommenda-
6 tion if I'm convinced that the program is not adequate to
7 protect the public health and safety, and I assure you I
8 will do it without the drop of a hat.

9 COMMISSIONER AHEARNE: That you would make a
10 recommendation.

11 MR. RYAN: That's what I said.

12 COMMISSIONER BRADFORD: Bob, have you ever
13 recommended to an Agreement State before that they close a
14 facility down?

15 MR. RYAN: I can't think of one.

16 Wayne, in your experience in the past, have we
17 come to that juncture?

18 MR. KERR: I can't remember, Commissioner, whether
19 we've -- we've never done it in the format that we've done
20 it here.

21 MR. RYAN: Macke Flats?

22 MR. KERR: Well, no, I don't think we recommended
23 Macke Flats, but --

24 MR. GOSSICK: I seem to recall one, but I can't
25 pinpoint it. It was about three years ago, or there was

1 some licensee, but I just don't recall the details.

2 MR. SHAPAR: I think it only fair to say, though,
3 that the ambiance and the ethic of looking at these
4 agreements in the past may not be identical to the ambiance
5 and ethics of today.

6 COMMISSIONER BRADFORD: My next question was going
7 to be whether the recommendation had ever been rejected
8 before.

9 Lee, in the case that you remember, was it accepted?

10 MR. GOSSICK: As I recall, it was shut down, yes.

11 MR. RYAN: As a general proposition, Commissioner,
12 I think that the Agreement States pay very strict attention
13 to our suggestion.

14 Let me give you an example. Condition uranium mill
15 licenses on the outcome of the generic environmental impact
16 statement. The contents of the generic environmental impact
17 statement, it was completely unknown. We had not begun to
18 set pen to paper.

19 We asked the Agreement States wherein mills are
20 operating to condition licenses which may be granted between
21 that date and the time that the statement came out on the
22 outcome of an unknown piece of paper, and they said "right on;
23 we'll do it."

24 COMMISSIONER GILINSKY: You're going to have a draft
25 for us tomorrow?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. RYAN: That will be tomorrow.

COMMISSIONER GILINSKY: Very good.

Thank you.

(Whereupon, at 4:37 p.m., the meeting was
adjourned.)

* * *