

ORIGINAL

NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

PRESS BRIEFING

LESSONS LEARNED FROM THREE MILE ISLAND ACCIDENT

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Place - Washington, D. C.

Date - Wednesday, 2 January 1980

Pages 1 - 36

Telephone:
(Code 202) 547-6222

ACE - FEDERAL REPORTERS, INC.

Official Reporters

415 Second Street, N.E.
Washington, D. C. 20002

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION
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5
6 PRESS BRIEFING

7 with

8 DR. HAROLD R. DENTON
9 Director, Division of Site Safety and Environmental
Analysis, Office of Nuclear Reactor Regulation

10 on
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12 LESSONS LEARNED FROM THREE MILE ISLAND ACCIDENT
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1717 H Street, N. W.
Washington, D. C.

Wednesday, 2 January 1980

pv DAV

P R O C E E D I N G S

2 MR. FOUCHARD: Everybody got the handout, I
3 assume. I think Mr. Denton has some opening remarks to tell
4 you how we got this place in that time, and then he'd be
5 happy to take your questions.

6 In addition, those of you who may want breakdowns
7 of individual plants which are in the lists, my good
8 friend, Thomas Telford, over here, promises that he has them
9 with respect to what utilities need to do what. So, we'll
10 try to take care of those questions a little later on.

11 But let's get started now with Harold Denton.

12 MR. DENTON: I can tell it's a slow newsday by the
13 number of people who showed up today.

14 What we're doing today is announcing and signing
15 the orders which I briefed the Commission on about 30 days
16 ago. These orders go back to the recommendations of our
17 Lessons Learned Task Force. Immediately after the Three
18 Mile Island accident we set up an internal task force to
19 identify those changes which should be made promptly in
20 those plants which are in operation. That task force has
21 completed its effort and published this report, NUREG-0578.
22 They've identified about 24 items of changes. These changes
23 include design changes, staffing changes, emergency response
24 changes.

25 We took that recommendation of the Lessons Learned

pv DAV . 1 Task Force, sent copies out to all operating utilities, had
2 regional meetings to which we invited all utilities to
3 attend, followed up with several letters from
4 Darryl Eisenhut and a letter from me on October 30, spelling
5 out in detail what was to be required.

6 We had two types of items in the book. Category A
7 items were those which were to be done by January 1, 1979.
8 And Category B items, which will take a bit longer. We'll
9 be talking about the end of 1980.

10 It took a lot of effort, working with each utility
11 to go through the applicability of these Lessons Learned to
12 the individual plants. A number of plants did make
13 commitments to make all the Category A changes by the end of
14 the year. In fact, I think when I briefed the Commission,
15 the utilities and the staff were in agreement on 98 percent
16 of the total package and in agreement on 90 percent of the
17 schedules for implementing those items.

18 But a number of utilities either did not want to
19 make the changes that we had asked for or did not want to do
20 it on the schedule that we'd asked for. So, in order to
21 provide them a more formal opportunity to give us their
22 views and also to be sure that we had these changes made as
23 soon as practicable, I am today signing orders for all those
24 plants which have not met the Lessons Learned Category A
25 January 1 deadline.

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What I have decided to do, because a number of plants were shutting down in January for refueling and other causes, is to grant a one-month extension of the date for those plants who had planned to shut down. So, for a number of plants I have moved the date from January 1, 1979, to the end of January 1980. In other words, a 30-day extension. I will tell you in a moment how many plants there are in that category.

I will also discuss the impact of any shutdowns required as a result of these changes with the people in the Department of Energy. We have today Mr. Weiner and perhaps others from the ERA part of the DOE. They provided us their views on the impact of these shutdowns, if necessary, on the reliability of the grids in those areas. They expressed concern about three areas in the U.S. They were concerned about reliability of the grids in Florida; about the grid that includes Oconee; and about the Northwest grid, which would include San Onofre.

So, I have in my orders made a special provision for those plants to allow them an opportunity to justify why, on the basis of power reliability, they may need an extension beyond the date that we would have otherwise given. So, with that, we are issuing today either orders or letters to 68 plants. There are two plants for which I am not issuing orders; they are for TMI Units 1 and 2, because

pv DAV 1 2 couldn't make them anyway and I will be handling in the
2 course of the ongoing licensing procedures that's in place.

3 So, with that short introduction, I will take
4 questions.

5 VOICE: Some people might wonder why a one-month
6 extension; why not, since there was fair warning, order
7 shutdowns for those who have not complied as of January 1?

8 MR. DENTON: I tried to look at it on the first of
9 December and asked myself whether we should go ahead and
10 insist on a January 1 shutdown or allow some extension. And
11 there was one plant viewed like three days into January for
12 refueling outages, other plants seven days, and another one
13 two weeks; then there were plants who had planned to shut
14 down in February. So, about half the plants were scattered
15 on out all the way through June with their preferred
16 schedules.

17 Since there had been some confusion back and forth
18 as to the exact nature of the change we required, I felt
19 like giving a one-month extension was not unwarranted. All
20 of these plants have had in-place compensatory measures,
21 such as extra operators, during the time since Three Mile
22 Island.

23 VOICE: How many plants have complied with your
24 requirements by the January 1 deadline?

25 MR. DENTON: Let me find that sheet. There were

pv DAV . 1 30 plants which did comply with the January 1 shutdown.
2 They're either shut down now or shut down on the 31st of
3 December and are making the change before they start up
4 again. So, there were 30 plants which will not operate in
5 the new year without having these changes made.

6 VOICE: Excuse me. You're talking there about two
7 kinds of things: either a plant that was going to shut down
8 anyway; or a plant that's going to remain open and make the
9 changes that you required. Is that correct?

10 MR. DENTON: I have a list of the plants — maybe
11 I could give it to you later — that will clarify. Take
12 Zion, now, for example. It shut down early in December,
13 made the changes, and are now back in operation. They're
14 operating today but they made the changes sometime in
15 December.

16 VOICE: That is among the 30 plants?

17 MR. DENTON: That's among the 30 plants.

18 Now, Beaver Valley is shut down now for some
19 reason other than just this order, and they will make the
20 change before they resume operation.

21 So, there's one plant, I think, that is shutting
22 down now, Big Rock Point, just for the purpose of making
23 these changes.

24 VOICE: Which one?

25 MR. DENTON: Big Rock Point shut down before the

pv DAV 1 new year began in order to make these changes.

2 So, there are 30 plants which, for one reason or
3 another, were able to meet the January 1 deadline.

4 VOICE: Did you say there are about 24 points they
5 had to cover?

6 MR. DENTON: Yes. There are 14 plants which had
7 planned to shut down sometime in January anyway. A normal
8 refueling outage or special shutdown for inspection. So,
9 those plants are getting confirmatory orders which confirm
10 their intent to shut down in January and not resume
11 operation unless they made all these changes.

12 VOICE: How many plants would you expect to be
13 operating on February 1 or capable of operating on February
14 1, in compliance with your requirements, and how many will
15 not?

16 MR. DENTON: By the time February 1 rolls around
17 -- let me go through the next category and then I will come
18 back and answer that.

19 There are some changes which won't be made
20 necessarily on the end of January because of equipment
21 unavailability, which would create a run on certain types of
22 equipment -- and some utilities didn't get -- weren't able
23 to get it on the same schedule as others. Some of the
24 bigger utilities, such as Commonwealth Edison, could procure
25 the equipment from plants under construction and so forth.

pv DAV 1 Other utilities are having problems getting the equipment.

2 So, for a couple of items which were
3 equipment-related, the order asked that that be installed
4 within 30 days after the receipt of the equipment, and it
5 also asked that the licensee document the best efforts to
6 obtain the equipment. So, we're only talking about a small
7 fraction of the items which were extended beyond February;
8 they were equipment-related.

9 Then, for those plants that have power-reliability
10 issue -- Oconee 2 and 3, Oconee 1, St. Lucie -- we are
11 providing them an opportunity to plead their case with
12 regard to the grid stability in their region and not grant
13 an extension there beyond the end of January, if warranted.
14 So, in those plants, one or two are in the question there
15 that has been developed by ERA.

16 VOICE: Do you have an idea of how much, on the
17 average, each plant will have to spend to come up to what
18 your requirements call for?

19 MR. DENTON: Let me answer that right after I try
20 to answer yours.

21 VOICE: How many plants will meet your deadline?
22 How many won't meet your deadline? How many will be able?

23 MR. DENTON: Well, they all have to meet the
24 order.

25 VOICE: But meet the deadline of January 31, how

pv DAV 1 many will have to shut down, I guess, is the question? How
2 many do you expect?

3 MR. DENTON: Of the 30 which we fully expect to
4 meet the end-of-the-year deadline, there is only one that is
5 now down just for this purpose. Now, for those in January,
6 there will be two which will have to make unplanned
7 shutdowns for this purpose.

8 VOICE: By the end of January?

9 MR. DENTON: By the end of January, there will be
10 14 more plants in compliance, two of which are shutting down
11 just for this purpose. That's Arkansas Unit 1 and Peach
12 Bottom Unit 2 are shutting down in January just for this
13 purpose. Otherwise, they would have preferred to do it
14 later on.

15 Then there are 19 plants which will have to do
16 everything for which they have the equipment by the end of
17 January. But these are cases where there might be one piece
18 of equipment out of the 24 items that they don't have by the
19 end of the month, and there the order says "Do everything
20 that can be done by the end of January, and do in 30 days
21 any items which are equipment-dependent." So, there is
22 going to be essential compliance by the end of January
23 unless it's, one, equipment-related, for a few plants; or,
24 two, unless the special power reliability problems give us
25 reason to provide an extension.

pv DAV 1 VOICE: That's only in Florida, South Carolina,
2 and the Northwest?

3 MR. DENTON: Yes. The Northwest one is a rather
4 unique case. Apparently, the power shortage is actually up
5 in the Northwest, but the plant being affected is San
6 Onofre, and a lot of the southern California power is being
7 shipped north.

8 VOICE: But there will be three plants, then,
9 shutting down solely because of your order: one to meet the
10 January 1 deadline, and two during January to meet the
11 extended one-month deadline?

12 MR. DENTON: And there may have been plants during
13 December which went ahead and shut down just for this
14 purpose, but I don't have that breakdown.

15 VOICE: Are you saying, in effect, that you are
16 giving a January 31 deadline with the possible exception of
17 five plants?

18 MR. DENTON: And a few pieces of equipment.

19 VOICE: Or shut down.

20 MR. DENTON: Yes. I would rather state it
21 positively, that what I want to have in place, implemented
22 in all these plants, are these lessons that we've learned
23 from Three Mile as soon as practical.

24 VOICE: What are some of the more important
25 changes you're insisting on that you say are necessary to

pv DAV 1 keep on operating.

2 MR. DENTON: Well, let's take one that involves
3 personnel. One of the changes is that they must have on each
4 shift a technical adviser. This is someone with an
5 engineering degree who's in the plant at all times, able to
6 advise the operators in the event that conditions get beyond
7 those planned for.

8 Another one that's very important is an emergency
9 response support center. This is a provision inside the
10 plant where they have data displayed where they have
11 meteorology equipment, where they have ability to measure
12 the amounts of radiation being released, do emergency
13 planning, and much better provisions to prevent a real
14 emergency, and to advise us in the state.

15 As you probably already know, we've already sent
16 action letters out to all the plants that define what
17 conditions in the plant warrant types of response.

18 Another change is positive indications on
19 pressurizer relief valves. As you may recall, in the Three
20 Mile Island accident, there was a question of what did the
21 green light mean and what did the red light mean. What we
22 have now on all valves is a positive mechanical switch that
23 indicates valve position for relief valves such as failed at
24 Three Mile.

25 VOICE: What are the principal problems causing

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1 the delay in the deadlines, since most plants have failed to
2 meet it?

3 MR. DENTON: The ones that deal with procedures and
4 personnel can be done without a shutdown. I think the one
5 that's causing the most trouble is containment isolation. You
6 may recall, at Three Mile some of the water was pumped out
7 early on in the accident over to the auxiliary building.
8 What we're requiring is that containment isolation signals be
9 rewired so that once containment isolation signals are received,
10 it's not automatically reset when that condition corrects, so
11 that each individual piece of equipment has to be evaluated by
12 the operator before he would open up an isolation valve. And
13 that's involving, I heard in one case, 11,000 feet
14 of wiring for the one utility.

15 The other principal problem is putting on these mecha-
16 nical limits, which is on the relief valves and safety valves.
17 And you have to buy equipment which meets all the qualifica-
18 tions for radiation.

19 VOICE: How much, on the average, does category A
20 cost for each plant?

21 MR. DENTON: I asked staff that earlier. It's not
22 very much, because it's mainly administrative and procedural.
23 I guess the shift technical adviser, five shifts, \$50,000 a
24 person per shift, would be \$300,000. The equipment itself,
25 I think, is small. I haven't heard any real firm estimates

1 from utilities on the category A costs.

2 VOICE: How much does it cost for each reactor to
3 shut down, on the average?

4 MR. DENTON: If it shuts down, it depends on where
5 they get the replacement power from, whether it's burning
6 coal or oil. But I think we use an estimate of the order of
7 a quarter of a million dollars a day. But the decisions that
8 we made today were not made on the basis of the price of power,
9 but really, in the five plants that we have provided an
10 opportunity for an extension beyond the end of January, it
11 was based on grid reliability.

12 VOICE: Are you confident that these changes will
13 prevent another Three Mile Island?

14 MR. DENTON: I'm confident they'll prevent another
15 accident like Three Mile Island. We focused on the Three
16 Mile Island syndrome. They involve auxiliary feedwater flow,
17 small break loss of coolant, response of a plant. But these
18 are not a complete package of changes at all. These are very
19 narrowly focused to assure that the accident such as Three
20 Mile cannot happen again.

21 But I wouldn't want to pretend at all that this is
22 all the changes. In fact, we have a Long-Term Lessons Learned
23 report and an Action Plan that's in preparation now, that makes
24 far more sweeping changes in the way plants are designed and
25 operated. This is focused on the accident that happened and

1 our initial response to preventing that type of accident.

2 VOICE: When will these other changes be implemented?
3 Do you have any kind of a target date for the final package?

4 MR. DENTON: As you may know, we have a two-inch-thick
5 Action Plan before the Commission now that has all the
6 recommendations of the Kemeny Commission and all the recommen-
7 dations from our advisory committees and any other source,
8 and projected dates for when they would be applied to operating
9 plants and plants under construction and plants undergoing
10 licensing. The final dates have not been set.

11 The Commission is also awaiting the outcome of the
12 Rogovin inquiry.

13 VOICE: How long would a plant have to shut down
14 just to implement these changes?

15 MR. DENTON: I guess we've heard estimates from
16 three days to three weeks. If you ask me, I'd say eight to
17 ten days is a good estimate for a typical plant. But it
18 depends only how close the individual plant is to complying
19 with these now. Some plants already have positive valve
20 indications, for example. Some plants, our most recent plants,
21 have very good containment isolation signals. The old plants
22 don't.

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1 VOICE: With these changes, do you feel comfortable
2 about avoiding another accident of the type of Three Mile
3 Island?

4 MR. DENTON: I feel comfortable about avoiding
5 another accident of the type of Three Mile Island. But
6 Three Mile Island, you know, was just one class of accidents.
7 It involved a small break loss of coolant accident resulting
8 from a stuck-open relief valve. And these changes are
9 intended to address that problem.

10 They also help some other types of accidents, such
11 as the shift technical advisers, who could assist in any
12 type of accident. The emergency response center should make
13 it easier to provide recommendations to Government for any
14 type of accident.

15 But we have a whole panoply of recommendations that
16 would be forthcoming to take a broader view of the actions.

17 VOICE: Mr. Denton, suppose all this goes as you
18 hope, and on the 1st of February or shortly thereafter the
19 plants are all in compliance or can be in compliance, unless
20 you know there's a part missing. Can we expect then an
21 announcement saying: Well, the next deadline is January 1st,
22 1981, and all our safety changes have been made that can be
23 made, and therefore we will commence with licensing of
24 nuclear plants?

25 MR. DENTON: That's a decision to be made by the

1 MR. DENTON: That's a decision to be made by the
2 Commission, and I think it will be made in connection with
3 this Action Plan, once they approve an Action Plan that will
4 lay out the future course of licensing and changes and the
5 like in existing plants. And the Commission meets, I think
6 is scheduled to meet again, several times in January on the
7 Action Plan.

8 VOICE: Under category three, you say there are
9 21 facilities that either will have to have all of the changes
10 completed by January 31st or be able to show why they haven't.
11 Does that mean that you're going to allow another extension?

12 MR. DENTON: Only for equipment.

13 VOICE: But these orders were originally given to
14 the companies back in September. If they still haven't gotten
15 the equipment by January 31st, wouldn't it be reasonable to
16 assume that they're dragging their feet and expecting to get
17 more delays and more extensions?

18 MR. DENTON: I was concerned about that and I had
19 the staff call the manufacturers of this equipment to establish
20 that there really is a shortage of certain types of equipment.
21 I don't take at face value the assertion that they can't
22 obtain it. But we have checked and in those cases to date
23 we satisfied ourselves that the main factory has sold every
24 piece that he had on the shelf and is busy making more. And
25 so it's not a question of dollars or being slow. It's just the

1 sheer unavailability of some of these pieces of equipment
2 that no one anticipated a market for.

3 VOICE: So if they come to you on January 31st and
4 say, I still haven't gotten the equipment I need?

5 MR. DENTON: They'll have to make that case and
6 we'll call around to make sure that every effort is being
7 made to get it.

8 VOICE: Thank you.

9 VOICE: Under category three plants, are you saying
10 that they're going to shut down in January to do everything
11 they can do except for the one piece of equipment that they
12 don't have, and then shut down again in February when they
13 get it or whenever, in March, April, May, and then put it in?

14 MR. DENTON: Let me ask how that order is written.
15 I think that's right.

16 VOICE: So they'll have actually two?

17 MR. DENTON: All the equipment that you've got in
18 January, you will shut down and install. If there is one
19 piece missing, you'll have to shut down again within 30 days
20 after.

21 VOICE: Is there some kind of staggering, so that
22 you don't have, let's say, ten of these 21 plants down all
23 at the same time, or depend on individuals?

24 MR. DENTON: That's why I asked ERA's opinion on
25 what the impact would be, and it's on the basis of their

1 advice. They identified these few sensitive areas in the U.S.

2 VOICE: So even if all of the 21 should be down at
3 the same time, which they probably won't be, but that wouldn't
4 be as serious except in those three areas?

5 VOICE: Let me ask Mr. Wiener to respond to that,
6 since I really can't discuss the impacts first-hand.

7 MR. FOUCHARD: Would you identify yourself.

8 MR. WIENER: I'm Richard Wiener, Director of
9 Power Supply Reliability at the Department of Energy.

10 We've targeted three areas that have preliminary
11 indications of concern for reliability or other system
12 requirements. We'll be asking each of these three systems
13 to respond to a very detailed questionnaire quickly to confirm
14 or help us confirm this reliability consideration. They are
15 in the Virginia-Carolina area, which contains the Oconee and
16 Surry units; the Florida region is the second; the California
17 region, Mr. Denton has indicated, is a unique situation, where
18 the San Onofre unit is supplying energy as part of the western
19 supply area. That supply is necessary to offset an energy
20 shortfall in Oregon. Oregon has been suffering from an energy
21 shortfall due to weather conditions and the shortage of the
22 Trojan nuclear unit for some time. The Trojan unit has just
23 come on line. We are monitoring that situation daily.

24 You'll recall the President did sign an emergency
25 energy declaration last week for Oregon to allow a waiver of

1 certain environmental regulations, so that we could support --
2 we may or may not have this problem as the next few weeks
3 evolve.

4 MR. DENTON: I want you to mention that that waiver
5 didn't concern nuclear.

6 MR. WIENER: The environmental waiver dealt with
7 Western Turbine that was gas-fired, that belonged to
8 Portland General Electric Company, also the major owner of the
9 Trojan unit. It had to do with their exceeding their environ-
10 mental requirements as far as air quality.

11 VOICE: If I understand it, category three includes
12 21 plants. But you're saying that the Oconee plant really
13 belongs in that category.

14 MR. DENTON: On the basis of the advice from ERA
15 today, I moved them down into the category four area, like
16 Crystal River and St. Lucie, which means that they will be
17 provided the opportunity to show good cause on the basis of
18 power reliability.

19 VOICE: Just to clarify, the five you're talking
20 about are San Onofre, Crystal River, St. Lucie, and Oconee 2 and
21 3?

22 MR. DENTON: Yes.

23 VOICE: Nail down the math on this. You said
24 30 plants during January will either be operating meeting
25 your requirements or shut down for some other reason.

1 MR. DENTON: Yes.

2 VOICE: Does that mean, then, that the number of
3 plants given a reprieve by your one-month extension are 28
4 plants? 28 plants will have one more month to do something
5 which they should have done on January 1?

6 MR. DENTON: It would be 38 plants. In other words,
7 there's 70 plants licensed to operate, roughly, in the U.S.,
8 two of which, TMI-1 and 2, I said, are not covered here
9 because they're being handled in another manner. So 30 plants
10 are fully meeting the January 1 deadline and are not operating.
11 That leaves 38 somewhere else.

12 VOICE: They are the ones that are actually affected
13 and given a reprieve?

14 MR. DENTON: Right, they're given a one-month
15 extension, plus I am giving a 30-day extension for equipment
16 unavailability, which affects a few items. And then there are
17 five plants of that 38 that I'm offering an opportunity to
18 show why our power system demands a slight additional exten-
19 sion.

20 The orders also say that, regardless of the reason,
21 they must be in full compliance by June 1st, just to be sure
22 that there's no equipment supply problem and it just drags on
23 and on, our power reliability problem drags on and on. So in
24 no case does the order permit operation for any reason beyond
25 June 1st.

1 VOICE: What's the essential reason for the delay?
2 Difficulty in getting equipment? Or are any utilities reluctant
3 to comply?

4 MR. DENTON: As I indicated, I think we had 90
5 percent -- if you take all the items and multiply them by the
6 number of plants, which is the way I got to my statistics,
7 originally there were about 2 percent of the items that
8 someone wanted to argue over. They didn't think they needed
9 them.

10 For example, one utility did not want the capability
11 to measure accident releases on-site. He wanted to be able
12 to rely on off-site measurements. That's what we'd gone through
13 at Three Mile Island and I thin' it's completely unsatisfactory.
14 So that's why we have in the order: you provide the capabi-
15 lity to measure releases, a high range, on-site.

16 So I think we're now down to zero arguments on the
17 substance of the requirements. But then there were people
18 who did want to argue schedules: Why don't you let me go my
19 normal refueling outage in April, May, or what have you?
20 And I said: I'm not smart enough to decide month by month,
21 one-month extensions for everybody who didn't make it, plus
22 these slight additional twists for equipment availability.
23 So I'd say the argument was maintenance schedule; everyone
24 wanted to do it when it was most convenient.

25 VOICE: I have a question for Mr. Wiener. Why is

1 it that Florida plants were unable? What was the problem
2 with the energy reliability?

3 MR. WIENER: Florida is a capacity situation. If
4 these units were all taken out at the same time, there won't
5 be sufficient capacity in Florida to prevent a blackout type
6 of outage. Florida has been suffering several of that type
7 of an outage in the past six or seven months. I'm currently
8 having a reliability investigation done in Florida, because
9 of the multiple occurrences that have happened. There have
10 been something like 12 in 6 months of actually systems going
11 black from this kind of shortage. There are very weak ties
12 from Florida to Alabama and Georgia. The rest of Florida is
13 surrounded by water, so that a multiple outage like this, the
14 simultaneous outage of these units, will cause a problem.

15 We're not saying that none of these units should be
16 taken out in this period of time. We're saying that they
17 should not be taken out simultaneously, such that we can
18 achieve some sort of margin to protect against the situation
19 Florida is in because of that.

20 VOICE: What's the reliance on nuclear power in
21 Florida; do you have any idea?

22 MR. WIENER: There's four units in Florida.

23 VOICE: Do you have any idea what percentage of
24 energy in the state comes from nuclear power?

25 MR. WIENER: No.

1 MR. DENTON: Let me project for you what I think's
2 going to happen in Florida. One plant is down for refueling
3 and doesn't expect to start up again until the end of January.
4 If they do start up around the end of January, one of these,
5 say St. Lucie or Crystal River plants, will shut down at that
6 same time for a period of two weeks to make these changes.
7 And the next one will shut down for the next two weeks in
8 February. Then the fourth plant is shutting down for refueling
9 anyway, of course, in March.

10 So it's pretty tight and everything has to go right
11 between the start-up of this first plant, the next two plants
12 fit in in February, and then the planned shutdown of the
13 fourth one, to avoid having more than one plant down, for this
14 reason. I think it can be done, and we'll be watching it on
15 a day to day basis as we get into February and try to prevent
16 a requirement that one plant shut down one day before the
17 next one starts up in operation.

18 VOICE: So if everything works out correctly --

19 MR. DENTON: There won't be but one plant down at
20 a time.

21 VOICE: And they should all be completed by March 1st?

22 MR. DENTON: Yes, or down. The fourth one would be
23 shut down.

24 I guess I might highlight one other thing here.

25 You will notice that our highest population density sites

1 fall into the early categories. Zion may change at the
2 end of December. I think Indian Point 3 will make the changes.
3 Indian Point 2 will have made all the changes during the
4 shutdown beginning on January 15th.

5 VOICE: Why do the 21 facilities in category three
6 have to adequately demonstrate that they'll be able on
7 January 31st?

8 MR. DENTON: That's only for those items that are
9 equipment-related.

10 VOICE: When do they have to prove this or demon-
11 strate it to your satisfaction, since, when you say you can't
12 go beyond it.

13 MR. DENTON: Let me ask for legal advice. What
14 would you say? Anybody remember?

15 MR. LIEBERMAN: It doesn't provide a specific time,
16 since the order is effective upon issuance. They need to get
17 that information in as soon as possible, so that we can make
18 a determination prior to January 31st.

19 MR. DENTON: There are only two items, I think, out
20 of the list of 24, that are equipment-related and there are
21 some problems with. Maybe it's three: containment isolation
22 equipment, valve position indicators, and the subcooling
23 indicator. The subcooling is an engineering term for being
24 sure you have the pressure high enough so the water doesn't
25 boil. We've had it in effect in all plants since

1 Three Mile Island, required that the pressure be maintained
2 considerably above that required to suppress boil-off.

3 VOICE: Two of those things essentially are instru-
4 ments for control room operators. The third one, the contain-
5 ment isolation --

6 MR. DENTON: That's rewiring to be sure that the
7 containment isolation valves don't automatically reopen when
8 the signal disappears.

9 MR. EISENHUT: The valve position is also quite often
10 a piece of equipment in the plant.

11 VOICE: When you sent out your October letters, did
12 you tell them that they would have to have these changes made
13 by January 1st or else shut down?

14 MR. DENTON: I didn't order that. That's when I said:
15 If you don't expect to meet January 1st, please let me have a
16 valid reason in the next two weeks. That's when I received
17 a plethora of everyone asking for exceptions and explaining
18 their special problems and so forth. So in trying to cut
19 through it, that's how I came to a decision that one month
20 wasn't an unreasonable extension for that group.

21 VOICE: In that letter, you didn't mention that
22 they would have to shut down, or did you mention that?

23 MR. DENTON: I didn't mention shut down, because I
24 can only say that in an order. That's not done in a letter.
25 But overall, I was pleased with the response. In other

1 words, a lot of the bigger utilities really did take the lead
2 in showing a responsible posture. Southern California Edison,
3 Commonwealth Edison, called back to indicate that they were
4 going to comply.

5 It tended to be some of the smaller utilities who
6 had special problems, who wanted special dispensations.

7 VOICE: Do you still have utilities that aren't
8 committed -- your commitment problems?

9 MR. DENTON: Let me ask how they shaped up. I guess
10 after our last Commission meeting, the Commission indicated
11 concurrence with orders. I don't know if there are any
12 hold-outs left.

13 MR. TELFORD: Not a one.

14 MR. DENTON: This order does provide an opportunity
15 for hearings if they wish to contest it.

16 VOICE: Not to make you go through the numbers
17 again, but I find with your press release they all add up to
18 the 68. Where does the five come in again? You have 30, 14,
19 21, and 3, which comes out to 68. You were mentioning five
20 more plants.

21 MR. DENTON: Let me ask someone.

22 MR. EISENHUT: Very simply, the press announcement
23 in category three had 21 plants. Two of those plants are the
24 Ocone 2 and 3 plants. So one way to look at it is changing
25 21 to 19, and take the Ocone 2 and 3 and move those out as

1 two separate plants that go with the plants in item 4 and
2 item 5.

3 VOICE: Two of those are what?

4 MR. EISENHUT: Oconee 2 and 3, Crystal River 3,
5 St. Lucie, and San Onofre 1. Those are the five plants.

6 VOICE: What's the difference between four and
7 five? Just that that one is --

8 MR. EISENHUT: One's in California and one's in
9 the West Coast. That's the only real basis.

10 VOICE: There's a difference in deadline?

11 MR. EISENHUT: There's a difference in deadline,
12 owing to the fact that those multiple units are of concern
13 in the state of Florida.

14 VOICE: So you're giving them --

15 MR. EISENHUT: 15 days to stagger the plants.

16 MR. DENTON: In other words, the 15 days is sort
17 of on the theory that you've got multiple units and you ought
18 to be able to make these changes in 15.

19 VOICE: In the case of category three, I mean, you're
20 really saying: Be ready unless you've got an equipment
21 problem. Is that it, in essence?

22 MR. DENTON: Make all the changes that are required
23 by the end of the month, unless there is an equipment
24 problem, and which there are usually two or three items that
25 are equipment-related for any plant. There are usually less

1 than that.

2 VOICE: If they have an equipment problem, how far
3 in advance would they have to let you know in order for you to
4 give them another extension? Before the 31st or on the 31st?

5 MR. DENTON: No. If they didn't come in by that
6 time, I wouldn't respond. I expect them within ten days.

7 VOICE: So they can't wait until the last minute.

8 MR. DENTON: No.

9 VOICE: Isn't there a big distinction in category
10 three, as I read it more carefully now?

11 MR. DENTON: Category two --

12 VOICE: I mean, within category three, except for
13 those changes which are dependent on delivery of necessary
14 equipment or reactors for which owners have not committed to
15 an implementation.

16 MR. DENTON: Let me explain category two more exactly.
17 Then you'll see what category three is.

18 All the category two plants have agreed to make the
19 changes some time in January, but not on the 1st. Ones like
20 Maine Yankee are going to run three days, five days, something
21 like that, extra. Ones in category two have already committed
22 to shut down in January and make these changes.

23 The ones in category three are people who wanted
24 beyond the end of January. So if they don't get confirmatory
25 orders, they get show cause orders that say, show cause why

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1 you should not make these changes in January.

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gshDAV . 1 So there's a difference, I guess, in the attitude of
2 Category 2 companies and Category 3 companies. Category 2
3 companies had all committed to do it in January, pretty
4 close to the deadline. Category 3 plants all wanted to go
5 beyond the end.

6 VOICE: In Category 3, you have those people who
7 had committed to implementation by January 31 and people who
8 weren't committed who said they couldn't do it.

9 VOICE: How many are not committed? How many in
10 Category 3 were resisting?

11 MR. DENTON: Let me ask our compiler. Tom, do you
12 want to take a guess at it, Tom Telford?

13 MR. TELFORD: I think there's a total of 17 plants
14 that will have to shut down earlier than they'd planned to
15 to meet these requirements. 16 of them will be in the
16 February time-frame.

17 MR. EISENHUT: It's an either/or situation. That's
18 why there's really two groups under Item 3.

19 Some plants, for example, may only have one item
20 remaining. But that item may be an equipment piece that
21 isn't coming in until April.

22 So they can order just specifically for that item.
23 Another plant may have the equipment but may want to do it
24 on March 15th.

25 They also did an order.

gshDAV 1 . . . MR. DENTON: We have that breakdown. If you'd
2 like to get together, we've got it plant-by-plant on when
3 their last proposal to us was.

4 VOICE: I guess -- could you have people who were
5 committed to implementing these changes by January 31, and
6 then say because of delays in equipment, we can't do it.
7 But we'll do it as soon as we can.

8 In that same category, did you have people who say, we
9 never committed to January 31.

10 MR. DENTON: Yes.

11 VOICE: Can you say how many never committed to
12 January 31?

13 MR. DENTON: We've got a table here that has all
14 the plants and all their commitment dates. And maybe
15 afterwards we'll psych it out, what the breakout was.

16 VOICE: Is it a valid distinction?

17 MR. DENTON: Well, some plants really wanted to
18 run until the next refueling, even though they had the
19 equipment. That's what we said no to.

20 VOICE: How many of those?

21 MR. EISENHUT: Very few. Most of the plants in
22 question here have an equipment problem or had an equipment
23 problem. They couldn't have done it in January, for
24 example.

25 We realize by waiting already until the end of January, a

gshDAV 1 lot of those problems were taken care of.

2 VOICE: Category 3 seems to be a real catch-all,
3 doesn't it?

4 MR. FOUCHARD: We didn't want to go beyond five
5 categories in the press release. That's the answer.

6 (Laughter.)

7 MR. FOUCHARD: I was confused enough with the
8 five.

9 MR. DENTON: Overall, I guess I'd like to leave
10 the impression that what we've done with the short-term
11 lessons learned are not going to be a loose end. There's
12 been comments about unresolved safety issues that go and go
13 year after year like ATWS, or what have you.

14 This is something where the staff has identified changes
15 that need to be made. We've had a lot of meetings with
16 industry.

17 We've come to the end of the road. We've established
18 deadlines and orders. So at least these particular lessons
19 will be behind us. And then we can worry about the longer
20 term actions or forthcoming actions from other groups after
21 that.

22 VOICE: What is the final deadline for all 68
23 operational plants? June 1?

24 MR. DENTON: Nothing can go beyond June 1. But I
25 don't think that there will be any cause for anyone to get

gshDAV 1 close to that.

2 VOICE: Is that a 6-month extension, then?

3 MR. DENTON: I'd sure hate to see it projected
4 that way.

5 VOICE: I mean is it?

6 MR. DENTON: No. The only reason I put in the end
7 date was just to keep someone on a single piece of equipment
8 stretching out the delivery date on that one.

9 That's the absolute end date.

10 VOICE: January 1 is the former absolute end date.

11 MR. DENTON: Yes.

12 VOICE: Now it's June 1.

13 MR. DENTON: No, it's the end of February and the
14 end of January is the end date, except for those things
15 which are equipment-related. Anything equipment-related I'm
16 not going to let it go beyond June 1.

17 VOICE: The initial deadline you gave was January
18 1 for compliance.

19 MR. DENTON: That's right.

20 VOICE: Now it's June 1 for compliance.

21 MR. DENTON: I wouldn't say it that way.

22 VOICE: How would you say it? You've got a bunch
23 of dates in there.

24 MR. DENTON: Except for equipment-related items,
25 the end of January is the end date. So that encompasses

gshDAV 1 95 percent of the items.

2 VOICE: Except in the case where all equipment
3 should be delivered and installed by June 1.

4 MR. DENTON: Maybe I'm not communicating. If you
5 look at the chart, there are only a very few pieces of
6 equipment that are going to be delivered after the end of
7 January. And I'm giving them 30 days after the delivery in
8 those few isolated examples.

9 But just to protect myself against one piece of equipment
10 not coming in until the end of the century, I'm saying June
11 1 for anyone.

12 So the end of January is really the date for the vast
13 majority of the items. And then there will be a few people
14 scattered on a few pieces of equipment between the end of
15 January and toward June.

16 MR. EISENHUT: That's 50 out of 1400, to give you
17 an idea. The vast majority of everything will be completed
18 by the end of January.

19 VOICE: 50 out of 1400 items.

20 MR. EISENHUT: You figure that there's about 1400
21 individual items that need to be fixed on the plants.

22 VOICE: Can you break it down by plants, of the 68?

23 MR. EISENHUT: We certainly could. We have that
24 information. We could go through it item by item.

25 VOICE: Break it down to the thousands of items, or

gshDAV 1 whatever.

2 MR. EISENHUT: The figure to remember is in fact
3 just that.

4 VOICE: How many plants, when you say a vast
5 majority?

6 MR. EISENHUT: How many plants?

7 VOICE: When you say the vast majority will be in
8 compliance by the end of January —

9 MR. DENTON: You can certainly take the 30 and the
10 14, which gets you 44 plants. That's the first two
11 categories will be in total compliance by the end of
12 January.

13 Then the others will be in total compliance, except for
14 equipment-related. And they will scatter as equipment
15 begins to come in with a diminishing number each month.

16 VOICE: What's the deadline for 5 with the
17 reliability problems?

18 MR. EISENHUT: It's also June the 1st is the end
19 deadline.

20 MR. DENTON: The same June 1st applies to them.
21 But the nominal one is February 15th, unless they make a
22 convincing case.

23 If you take San Onofre, I understood at least today they
24 plan to shut down something like January 21st, anyway.

25 So even though they're in this category and are being

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1 offered a chance to provide an extension, they apparently
2 think the situation will improve out there and do plan to
3 comply.

4 MR. FOUCHARD: That's just Trojan coming back up.

5 MR. EISENHUT: No. They had it originally
6 scheduled, for example, for a January 1 shutdown in order to
7 be in compliance by January 1.

8 But because of the energy reliability situation, they
9 were deferring that outage to January 21.

10 MR. DENTON: I expect the real world to be
11 somewhat better than these orders show because there will be
12 unexpected outtages in some plants between now and the end
13 of January. And we have as a general policy that whenever a
14 plant is down long enough to make these changes, we want
15 these changes made.

16 MR. FOUCHARD: Thank you very much.

17 (Whereupon, at 2:45 p.m., the hearing was
18 adjourned.)

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