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NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

Conference with
Atomic Industrial Forum

Place - Washington, D. C.

Date - Tuesday, 20 December 1977

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Conference with
Atomic Industrial Forum

Tuesday, 20 December 1977

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

Whereupon, the hearing convened, pursuant to
notice, at 10:00 a.m.,

BEFORE:

COMMISSIONER JOSEPH M. HENDRIE, CHAIRMAN

COMMISSIONER RICHARD T. KENNEDY

COMMISSIONER VICTOR GILINSKY

COMMISSIONER PETER BRADFORD

P R O C E E D I N G S

(1:35 p.m.)

CHAIRMAN HENDRIE: We are almost on time.

Bill, go ahead.

MR. PARKER: All right, sir.

Well, we will start by saying: Thank you very much for this opportunity to appear before you this afternoon. I think you have met most of the people here at the table. I am Bill Parker, chairman of the Forum.

Joe Rengel here is vice chairman of the Forum.

John Ward is chairman of our reactor and licensing safety committee.

Mike Miller here is chairman of our lawyer's committee.

And you know Carl Walske quite well, who is president of the Forum.

Some time ago back in the summer, we asked if we might have the opportunity to come before you. We thought at that time we would be able to view five of you sitting across the table, but events haven't led to that conclusion. So we are delighted to have this opportunity to come and appear before the four of you. Maybe there will be a fifth one one of these days, for us to bring him on board and bring him up to date, too.

We certainly recognize that your responsibility is

1 to regulate rather than promote the development of nuclear
2 power. We know, too, that such regulation has as its primary
3 goal the advancement of public health and safety and also,
4 assigning suitable respect for the environment.

5 I would say that industry encourages and supports
6 this regulation and heartedly endorses it, but I would put the
7 word "proper" in there and say that we encourage and support
8 proper regulation. And we would direct our words to you, that
9 we feel that this is a responsibility that lies on your should-
10 ers to take care of the public aspect of it, while at the same
11 time imposing the proper level of regulation on the industry
12 as such.

13 The Congress certainly has recognized that the
14 general welfare of the country would be enhanced by the con-
15 tinued development of nuclear power and the peaceful uses of
16 the atom.

17 So, basically, that is why we are here this after-
18 noon; to fill you in on some of the highlights as we see
19 the energy situation and also the problems of the nuclear in-
20 dustry in the context as how we see it today.

21 I would like to start off by briefly touching on
22 the overview from the electrical utility side and then Joe
23 Rengel will follow , giving a little brief overview of the
24 manufacturers' viewpoint, and then John Ward will follow, dis-
25 cussing a few of the licensing issues, and Mike Miller on a

1 few of the legal issues.

2 Mr. Chairman, we would propose to limit this to
3 some 20 minutes, or thereabouts, as far as making a few pre-
4 pared remarks. On the other hand, I would say that if you
5 want to break in and ask any questions as we go along, rather
6 than waiting until the end of the presentations, we would wel-
7 come that as well.

8 CHAIRMAN HENDRIE: All right. We will do it.

9 MR. PARKER: If there is time at the end, Mr.
10 Walske has a subject that he wants to discuss with you, also.

11 For the electrical utilities, our load growth this
12 year has been about seven percent. And as we look to the fu-
13 ture, we see that load growing and you get various predictions,
14 but they all range somewhere from 5.2 to 5.5 percent out through
15 the year 1986.

16 COMMISSIONER BRADFORD: When you say load growth,
17 do you mean kilowatt hours?

18 MR. PARKER: Kilowatts; peak, peak growth.

19 On generating capacity, we see that the growth from
20 1977 to 1986 going up by some roughly 49 percent. This is KW
21 capacity.

22 During this same period of time, we see nuclear
23 power, however, going from around the 48,000 megawatts that
24 we have today about 163,000 in 1986. And this is units that
25 are under order and in the pipeline and scheduled to come on

1 board during this period of time.

2 In other words, while the total generating capacity
3 is going up some 49 percent, we see nuclear capacity in this
4 same period of time going up 3.5 times what it is today.

5 COMMISSIONER GILINSKY: Do you have a number for
6 1985, just because the government forecasts tend to be tied
7 to that number?

8 MR. PARKER: I don't have one directly in front of
9 me. Carl, do you have a 1985 figure?

10 MR. WALSKE: Not to go with that, no.

11 MR. PARKER: If I can get it for you, I would be
12 glad to get it after the meeting and it provide it for you.

13 COMMISSIONER GILINSKY: Because these numbers are
14 a good deal higher than the numbers that are circulated in
15 the government, among the various agencies. And I was just
16 wondering whether you have looked into what the discrepancies
17 might be due to.

18 MR. PARKER: This comes from the NERC report that
19 was prepared and distributed in August of this year. But I
20 will be glad to get you an '85 figure.

21 COMMISSIONER GILINSKY: Because sort of the closest
22 you come to an official number, which is something that is
23 more or less agreed to by DOE -- well, at that time, ERDA,
24 FEA and NRC, was more like something like 110,000 in 1985.

25 MR. PARKER: In 1985? Well, I have the figure on

1 industry, and as I say, it is the NERC report that was pro-
2 vided in August, and they made quite a distribution on it;
3 150.65.

4 COMMISSIONER BRADFORD: What do you have for --

5 MR. PARKER: This is 1985.

6 MR. RENGEL: I have got 155.

7 COMMISSIONER GILINSKY: I think our staff would
8 probably say something close to 100 at this point. But let
9 me not hold you up.

10 MR. PARKER: If it so, we better go home and start
11 reviewing --

12 MR. RENGEL: Start shutting down plants.

13 CHAIRMAN HENDRIE: No, no. You will have to start
14 certain old plants, or buy some turbines, gas turbines.

15 But which ever of these several figures turns out
16 to be the case in 1986, the nuclear capacity increment will,
17 as you say, will be substantially, that delta will be sub-
18 stantially larger than the overall industry.

19 MR. PARKER: Yes, sir.

20 CHAIRMAN HENDRIE: On a fractional basis.

21 MR. PARKER: And my next point --

22 COMMISSIONER GILINSKY: I think that's right.

23 MR. PARKER: Now the next point I want to make,
24 and your figures give me a real grave concern, because again,
25 out of the NERC study, first, we had a summer reserve of around

1 30 percent this past summer. We will have about 32 percent
2 reserve for this winter.

3 But as we look longer range, based on these fig-
4 ures which I have given you for the growth, we see that the
5 reserves in the early to mid-'80s drop to somewhere in the
6 range 21, 22 percent. And you are talking now figures sub-
7 stantially below what I am using, and if that is so, then we
8 are talking about dropping below 20 percent, and certainly
9 the 21, 22 percent is predicated on present construction and
10 being able to maintain that construction schedule and that
11 the load forecasts are accurate, too, and not too low.

12 So we can see that because of these uncertainties,
13 there can be regions of the country that could be in dire
14 straits as far as reserve capacity by the mid-'80s.

15 All this brings us to the subject of future orders
16 and future commitments, as far as the utilities are concerned.
17 Now, it is now decision time for many utilities in terms of
18 looking to the next plants. And as they look at this, they
19 are faced with the most difficult decision; just determining
20 the choice of capacity, first. There is no gas for generat-
21 ing capacity. Oil will probably be prohibited in most areas.
22 Coal, while there is a tremendous thrust from the Administra-
23 tion for moving to coal, the environmental impacts are going
24 to be difficult to meet.

25 There are many other problems, as I view it, in

1 terms of reaching the goals that are projected for coal;
2 problems of manpower, capital expenditure, transportation
3 and others.

4 This brings it down basically to the nuclear and
5 what are its opportunities. And we are fast losing the
6 nuclear option because again of the long lead times and being
7 able to get these onstream when they are actually needed.

8 All of this says that we need to move rapidly on
9 nuclear. The public says we need nuclear. The most recent
10 Harris Poll; I was just reading about it coming up this morn-
11 ing, says that on the basis of 55 to 33, that we ought to
12 speed up nuclear construction. So everytime the public
13 speaks, they speak strongly in support of nuclear,

14 And yet, we face problems. We face problems
15 within the utility. We face problems with the Administration
16 and their policies for moving ahead. We face policies in the
17 regulatory arena.

18 Others following me will speak to the basic -- the
19 problems in the regulatory area, but just let me recite in
20 a hurried way the problems as I see them, from a utility
21 executive point of view, that stand in front of us.

22 And these are the very cumbersome and overlapping
23 federal, state and local plant licensing processes, the ever-
24 changing and increasing environmental restriction, the uncert-
25 ainty of the fuel cycle, and these are certainly nothing new

1 that you haven't heard all this time -- the problems with
2 regulatory rule change and retrofit, the great unpredictably
3 of cost and construction periods, and also, the -- we have
4 faced time and time again the possibility of reactor shut-
5 downs from government actions.

6 All of these are coupled, of course, with the
7 problems of half an inch. This make it very difficult for
8 the utilities to move ahead.

9 We have a budget this year, a capital budget, of
10 about \$20 billion. The utilities are projected to spend
11 about \$220 billion over the next -- between now and 1985.
12 So we are gutsy enough to make the decision, if we can get
13 some go-ahead from the Administration and from the govern-
14 ment to support us.

15 Thank you.

16 And Joe, would you pick up from there?

17 COMMISSIONER BRADFORD: That \$220 billion is total?

18 MR. PARKER: That's total, total for the utility
19 industry. And that is rounded off. It is somewhere between
20 \$220 and \$230 billion.

21 MR. RENGEL: There has been quite a bit of talk
22 about the fall off in nuclear orders. And I thought I would
23 try to put this in perspective for you, to try to give you
24 the change that has happened in the last two years.

25 So I took the period 1972 to '74 and the period

1 '75 to the present. And the total amount of thermal megawatts
2 that were ordered by the utilities, United States utilities,
3 in those two periods, were; '72 to '74, 225,000. And of that,
4 100,000 megawatts was fossil and 125,000 megawatts was nuclear,
5 giving nuclear about a 55 percent ratio.

6 From '75 through today, another 33,000 megawatts,
7 or only 15 percent of the first three years has been ordered.
8 19,500 is fossil and 13,800 is nuclear, or 42 percent.

9 So we haven't disappeared out of the marketplace
10 with respect to nuclear, but the difficulty in the whole gen-
11 eration area, because of the lack of peak load growth, has
12 shown up here as part of the utilities' concern.

13 And those -- this does not take into account the
14 cancellations that have been made in the meantime. So these
15 are the ones that were ordered in those years.

16 But I do have for the nuclear here and here is
17 something for each of you gentlemen.

18 (Distributing documents.)

19 MR. RENGEL: The backlog as reported in the papers
20 of the orders of each of the principal reactor manufacturers,
21 and their schedules are here. And you can see the first page
22 is Combustion Engineering, with a total of seven plants op-
23 erating, 26 on order for a total of 33.

24 None of their plants, however, are of -- indefinite
25 schedule.

1 Next is Babcock and Wilcox. They have nine plants
2 operating. They have 27 on order, for a total of 36, three
3 of which are international. However, of the 24 U.S. plants,
4 six are determined to be indefinite and have been postponed
5 to an indefinite schedule.

6 General Electric has a total of 37 plants operat-
7 ing and 62 on order, for a total of 99. They have 12 of
8 their 37 plants operating that are international, and 18 of
9 the 62 are on order -- on order, are international. Nine of
10 the plants in their schedule are indefinite.

11 The next is Westinghouse; 37 plants operating and
12 82 on order. Of those, 14 plants, international plants are
13 operating, and 22 are on order, for a total of 36 out of
14 119. There are four units that were indefinite, and of those
15 indefinite ones, two were cancelled the first of the month,
16 and that was Florida Power and Light, Dade County. So that
17 we are now down to 117 with two indefinite.

18 COMMISSIONER BRADFORD: What would be the pattern
19 of declining number of plants between '72 and '76?

20 MR. RENGEL: I can't answer that question. That
21 is just the way things turned out.

22 You know, utilities buy things in large -- big
23 bunches. For instance, Duke Power Company ordered five units
24 at once, and this would place five orders in one year, and
25 then they are spread out over a period of time, anywhere from

1 18 months to two years or so, in between the units.

2 MR. PARKER: I would answer the question for you,
3 that '74 and '75 were absolutely no-growth years. They
4 were flat plateau years.

5 COMMISSIONER BRADFORD: But the pattern is dif-
6 ferent for the other three?

7 MR. PARKER: You are speaking specifically of
8 Westinghouse.

9 MR. RENGEL: These are the dates the plants come
10 on line. This is the customer's -- this is the utility's
11 operating date.

12 COMMISSIONER BRADFORD: Okay.

13 MR. RENGEL: Which has been published in one of
14 several places; the Wall Street Journal --

15 COMMISSIONER BRADFORD: These numbers don't really
16 reflect plants in operation?

17 MR. RENGEL: The ones on the left-hand side re-
18 present the ones in operation.

19 COMMISSIONER BRADFORD: Then General Electric went
20 from 19 in operation prior to '72 to 15 in operation between
21 '72 and '76?

22 MR. RENGEL: No. GE went from 13 in operation
23 prior to '72 and from '72 through '76, 20 units of theirs
24 went in operation. You are talking about --

25 COMMISSIONER BRADFORD: You are talking about

1 Westinghouse?

2 MR. RENGEL: No; I am talking -- excuse me.

3 They had 19 in operation prior to '72, 15 went
4 into operation in those four years --

5 MR. PARKER: Fifteen more.

6 MR. RENGEL: Fifteen more, and three, up to the
7 first of November, and they have one more scheduled to go
8 into operation this year.

9 This just happens the way things turn out.

10 COMMISSIONER BRADFORD: It is still a different
11 pattern, but I had thought it was an absolute decline.

12 MR. RENGEL: No; there is nothing that I know of
13 that makes the pattern specific.

14 It does indicate, however, that there is a -- we
15 have had no orders of any significance, as you know, in the
16 last three years. We have had a total of 13,800 megawatts,
17 representing about 12 units.

18 And in 1976, there was only one unit placed, and
19 this year, there have been four. Of the units that have been
20 announced this year, two were options that had been placed
21 prior to 1975.

22 Now, the thing that is of significance, as far as
23 we are concerned, is that there is a significant backlog that
24 goes a long ways, and therefore, responsibility to keep teams
25 together and keep them going for this period of time. And

1 the smoother it can run, as you all know, the better off we
2 are in the whole process.

3 MR. PARKER: If there are no questions at this
4 point, I will call on --

5 CHAIRMAN HENDRIE: No. I understand the problem.

6 MR. RENGEL: I thought this might show it a little
7 better.

8 CHAIRMAN HENDRIE: For '79, maybe we should go in
9 for a plant.

10 (Laughter.)

11 CHAIRMAN HENDRIE: I am trying to help out.

12 COMMISSIONER BRADFORD: The problem, though, is,
13 in terms of incoming orders, in fact, if you accumulated
14 these graphs in a five-year period from '77 on the way you
15 have prior to '72 and then '72 to '76, they look quite sim-
16 ilar for those, for any given five-year period. The decline
17 wouldn't be any where near as dramatic as what you get by
18 taking the future in one-year jumps.

19 MR. RENGEL: Well, but the future in one-year
20 jumps also tells the problem that each manufacturer faces,
21 to whether or not -- he has got to survive those periods when
22 there is nothing.

23 And I thought it was important for you to recog-
24 nize that not everybody is in the same shape, that some people
25 have more problems than others and therefore, it is difficult.

1 And I didn't put on here, for instance, the
2 licensee awards. And I didn't show you the time by years
3 when the international orders are involved for General
4 Electric and ourselves, because there are only -- GE has 18
5 and we have 24, and all of those are in the periods through
6 1984, because the international arena, we can take an order,
7 build a plant in six years and have it in operation. In
8 the United States it is 12 years, approximately twice as long.

9 MR. PARKER: When the utility --

10 CHAIRMAN HENDRIE: There is a lot of planning over
11 here.

12 MR. PARKER: Yes, sir.

13 What we see and what we are concerned with on the
14 utility side is that if we cannot move ahead more positively,
15 if we cannot resolve some of these uncertainties so that the
16 choice is clear, and we certainly see the choice as clear from
17 the economic standpoint in almost every area of the United
18 States that we push hard for nuclear; we are going to lose the
19 expertise of the manufacturers and the suppliers, because
20 they are rapidly working of the backlog.

21 And as Mr. Rengel says, they are going to lose this
22 expertise if we don't get new orders on the books. Now
23 utilities did not place orders of any consequence in '75 and
24 '76. And in fact, they cancelled or deferred many that were
25 placed in '73 and '74 because of the no growth actions of '74

1 and '75 coupled with a very difficult financial situation for
2 a great many utilities across the nation. Part of the post-
3 ponements were due to financial consideration and not neces-
4 sarily load growth factor. This has improved somewhat, both
5 load growth-wise and financially in the last two years.

6 John?

7 MR. WARD: Mr. Chairman, in a former life, you
8 were fond of saying: It isn't necessary that we agree, but
9 that it is necessary that we understand one another. I hope
10 that continues to be your motto for operating, because I think
11 it is essential that we understand the purpose --

12 CHAIRMAN HENDRIE: As a minimum.

13 MR. WARD: As a minimum.

14 I am going to address certain of the procedurals
15 aspects. I do want to make one statement which Commissioner
16 Kennedy heard me make in San Francisco; that reform must be
17 addressed to reducing two principal time frames. One is the
18 time frame from placing of the order for the NSSS until it
19 comes in operation, because this is the time frame which is
20 critical for time cost of money.

21 The other area it must address is the overall sche-
22 dule, because the overall schedule is critical to utility
23 planning.

24 There are two different pieces of the problem
25 and the one that the Commission itself can directly affect

1 most immediately is the NSSS award until operation occurs.

2 COMMISSIONER GILINSKY: John, you were quoted --
3 I don't know whether it was correctly or not -- at the
4 San Francisco meeting; you were commenting on our --

5 MR. WARD: NUREG 02-92.

6 COMMISSIONER GILINSKY: Yes, and you say there they
7 go taking themselves off the critical path, but someone else
8 is going to be on it.

9 MR. WARD: Yes, sir.

10 COMMISSIONER GILINSKY: Could you somewhere along
11 the way explain that?

12 MR. WARD: Yes; yes, sir.

13 COMMISSIONER GILINSKY: Because all of these years
14 people have been telling us to get off the critical path,
15 and --

16 MR. WARD: I guess the problem, Commissioner, is
17 lateralling it to somebody else isn't removing the critical
18 path. This is the problem I see.

19 All right; I hadn't planned to go into that, so I
20 didn't bring my charts. But our present -- what I term our
21 current schedule, and by that I mean from the time the utility
22 makes the decision to go until the time the plant gets on-
23 line, is approximately 12 years. I contrasted that, just for
24 reference's sake, with what I call the no-licensing case,
25 which is on the order of six and a half to seven years.

1 I then looked at NUREG 02-92 -- I just happen to
2 have a copy with me -- 02-92, and looked at the principal
3 unique features.

4 And first, let me say that I think NUREG 02-92
5 is an excellent study. I think the Staff did a fine job. I
6 discussed this with Mr. Denton, and I said to him that if the
7 industry had taken part, I don't think there would be many
8 different things identified as problems that have to be
9 solved. And I think they did an excellent job.

10 I think the intent of their recommendation is
11 good. Our concern, and the concern I expressed in San
12 Francisco was with implementation, and the difference between
13 policy and implementation.

14 The two unique features are the acceptance review
15 and the issuance, the plan to issue a safety evaluation report
16 in a very short period of time; six months, after docket.

17 The acceptance review has been expanded from the
18 current so-called mini review which is a review for complete-
19 ness, to include a determination of technical adequacy. And
20 that is where my concern comes in, the definition of that
21 term, because I have heard many, many reviewers reject appli-
22 cations and reject positions because they are technically
23 inadequate.

24 And if the acceptance review is to make a determ-
25 ination that the application is technically adequate before it

1 is docketed, then this is another area of extreme uncertainty.

2 In effect, the technical review is performed prior
3 to docketing of the application. And while 02-92 says that
4 the acceptance review should be able to be made in a period of
5 60 days, two months; there is a great possibility -- in fact,
6 I think a certainty -- that that review will extend to equal
7 the technical review period as each branch looks at the appli-
8 cation for technical adequacy prior to allowing it to be
9 docketed.

10 So that in my charts, I show the acceptance review
11 as one year, which I think is optimistic.

12 I also showed PSAR, or application preparation time
13 in excess of 18 months, which is slightly longer than most
14 applicants are taking right now, although some of them do take
15 periods like that.

16 But I tried to indicate that the preparation time
17 would probably be longer because of having to get ready for
18 this uncertain period of time, the acceptance review, and mak-
19 ing sure that the application was as complete as possible.
20 trying to cover all bases before it is submitted.

21 COMMISSIONER GILINSKY: Well, it is pointed in the
22 direction of having as much work done as possible --

23 MR. WARD: Yes.

24 COMMISSIONER GILINSKY: -- before you get involved
25 in the spending of money and building things, and having as

1 complete an application as possible and of design, proceeded
2 as far as you can.

3 MR. WARD: Yes.

4 COMMISSIONER GILINSKY: It seems to me a desirable
5 thing to separate those two --

6 MR. WARD: There is no question that it is a good
7 goal. It is a good goal to have complete application. It is
8 a good goal to get rid of this pro forma Q2, Q3, or what ever
9 they are, in answer back and forth, and to get the application
10 in as complete a form as it can be, before it comes in.

11 My concern is, there is no discipline specified
12 for that time period. There is no management constraints
13 that would put pressure upon the Staff to keep the acceptance
14 review moving fast, as there is now, for instance, in the
15 technical review. There is a schedule and you watch those
16 very closely.

17 That would not appear in --

18 COMMISSIONER GILINSKY: I am sure we will have some
19 kind of color book for that one.

20 MR. WARD: I hope so. I hope so, and I hope there
21 is a very strict management control put on it. But I don't
22 see it. And it isn't specified in the document, and I am
23 concerned about the implementation.

24 And my speech in San Francisco and my concern here
25 is to make sure that you recognize that acceptance review can

1 be very, very long. It is an uncertain period. It makes the
2 docketing date uncertain. The docketing date is critical for
3 equipment purchase, for codes and standards. And we are back
4 to where we were with 50-55(a) where we were not sure what the
5 docketing date was going to be, so that we are not sure that
6 all of our equipment is purchased to the right codes and
7 standards.

8 COMMISSIONER GILINKSY: I guess I am left unsure
9 whether you think this is pointed in the right direction or
10 not, or you prefer the present system.

11 MR. WARD: I believe that getting rid of the Q1,
12 Q2 is good. I believe that the Staff working with the appli-
13 cant prior to submittal of the application is good. I think
14 technical adequacy ought to be the determination of the tech-
15 nical review and not the acceptance review.

16 Well, that was my point, and the point was that this
17 period was being taken out of so-called licensing time and
18 put in pre-docket, so the critical path was moving out of
19 your official time frame.

20 COMMISSIONER GILINSKY: I thought that was quite
21 clever.

22 (Laughter.)

23 MR. WARD: I am sure Howard did, too.

24 (Laughter.)

25 MR. WARD: But the other point that made that --

1 CHAIRMAN HENDRIE: I understand the difficulty.

2 MR. WARD: Okay.

3 The other point was the early site review, and I
4 won't get into that, because that is something that you don't
5 have total control over.

6 CHAIRMAN HENDRIE: Well, presumably to the extent
7 that one can do early site review, it doesn't relieve you of
8 any of the chain of events that you have to go through, but --

9 MR. WARD: No, but the point --

10 CHAIRMAN HENDRIE: If it could be separated from
11 the -- from a specific NSSS contract and decision on a speci-
12 fic unit and done at another time, the way we have dealt with
13 engineering scheduling problems for years, you look around and
14 see how we can manage to do many things as parallel as possi-
15 ble and squeeze down the overall time and make these things
16 go along together.

17 MR. WARD: The point, Mr. Chairman is, that to
18 standardize, we need stability. And to standardize, we need
19 to make use of standardization, we need early site reviews.
20 Standardization in and of itself isn't going to do much to the
21 overall schedule, because the critical path is --

22 CHAIRMAN HENDRIE: Well, but --

23 MR. WARD: The early site review has been completed
24 on the San Joaquin plant; it took four years. And that was on
25 limited issues. And I showed that period on my slide, which

1 extended the overall time frame to 14.5 years, using the
2 standardized application.

3 And the reason I said you don't have total control
4 over it is because the San Joaquin siting decision won't be
5 made solely by NRC, but it will be made by the California
6 Energy Resources and Conservation Development Commission and
7 others.

8 And this is the problem: multiple agencies making
9 the same decision, rather than the old cliché, one man, one
10 vote; one decision, one agency. That doesn't exist, and that
11 is necessary to make the early site review useful. It is
12 useful now on specific issues, NRC making the technical de-
13 cision on a specific site issue and then the applicant having
14 confidence that that decision is good, his design can go ahead;
15 he knows that he will get acceptance on that site issue when
16 he brings it in. That is a useful point.

17 But total site certification would stand, as you
18 well know.

19 Now, the other points that I wanted to make on
20 stability -- and these are points on licensing reform that
21 I feel fall under your cognizance, without due authority
22 under the present regulations, and all move toward stabilizing
23 licensing requirements.

24 We would like to see that standard format content
25 guide that was issued two years ago, for comment, come out and

1 let us know what they are supposed to have it in.

2 We would like to see the standard review plans
3 reviewed and those ratchets that exist in them -- and I think
4 several letters have come in to you showing some 55 of those
5 standard review plans that do not represent current practice
6 but represent ratcheting requirements. -- would like the stand-
7 ard review plans to represent your current practice, and we
8 would like them keyed to the standard format and content
9 guide as they are intended to be.

10 We would like to see expanded and consistent use
11 of the value impact methodology in regulation, particularly
12 in the issuance of regulatory guides.

13 COMMISSIONER GILINSKY: May I ask you: What is
14 your perception of the "stability of the process." I mean
15 do you see it still on some sort of a steep increase in re-
16 quirements, or has it stablized, do you think?

17 MR. WARD: I will give you two answers: It has
18 a potential to stablize. It is not stablized.

19 COMMISSIONER GILINKSY: But I mean, what, from
20 your point of view, has been happening in the last few years?

21 MR. WARD: There has been a great move towards
22 standardization and towards stability. The standard review
23 plans are a good idea, whose time maybe has passed. But
24 they ought to be implemented. The Commissioner is well aware
25 of those standard review plans, and they are a good idea.

1 But they, right now, are not useful because they
2 have not been used consistently and some of them are not
3 usable because they don't reflect current practices. That
4 is a move toward, I think, stability. I would like to see
5 the format guide stablized. We have seen Revision Two putting
6 along for a long time.

7 CHAIRMAN HENDRIE: Should be go ahead and specify
8 Revision Two and --

9 MR. WARD: Well, whatever revision needs be, Mr.
10 Chairman. But we don't have -- we have had that issue out
11 for two years and we are not sure where we stand. That, I
12 think, needs to be formalized.

13 We need to know the kind of information, in order
14 to come up with a short, meaty review, we need to know the
15 information you need to have. That's what that guide is
16 intended to do, and it is in a state of flux right now.

17 Now to further answer your question, these tools
18 are available to be used. They are not used consistently.
19 I think 02-92 pointed out facts along this line.

20 COMMISSIONER GILINSKY: My impression is that com-
21 pared with the years, the preceding years, or since 1970
22 or whatever, the late '60s, that things have leveled off a
23 good deal.

24 MR. WARD: Well, if you look at the bottom line,
25 though, Commissioner, they should be. Everything is pushing

1 towards stability, but the schedules keep getting longer.

2 COMMISSIONER GILINSKY: Oh, but the schedule --

3 MR. WARD: Back in the bad old days --

4 COMMISSIONER GILINSKY: Wait, wait, wait. The
5 schedules are driven by a lot of things, including utility
6 responses.

7 MR. WARD: Sure.

8 COMMISSIONER GILINSKY: And we are now in kind of
9 a different period when a lot of utilities are pretty relaxed
10 about responding to these applications. In fact, that is one
11 of the reasons some of these plants aren't getting built. It
12 isn't because they aren't licensed. It is because the utili-
13 ties don't want to build them.

14 So, I think we have got to be careful about sorting
15 these things out.

16 MR. WARD: I am sure that is the case in some
17 cases. I know the pressure from our clients doesn't indicate
18 what you are saying to be true. But I know it is in other
19 cases.

20 With our present schedule of 12 years, we are
21 at the point where the utility planner is having a tough
22 time deciding whether he can use nuclear or not, because he
23 can't plan ahead that far.

24 COMMISSIONER GILINSKY: Well, I mean, I recognize
25 that with uncertainties about demand, you obviously shift

1 towards the kinds of plants you can build in a short period,
2 because you don't want to delay making decisions, and that
3 is, you know, an understandable situation.

4 Of course, to the extent one can, one wants to re-
5 duce these periods from planning or conception to completion
6 to as short as possible, obviously.

7 MR. WARD: Yes.

8 COMMISSIONER GILINKSY: But I think that the import-
9 ant thing, it seems to me, is -- and the thing that has really
10 created difficulties for the nuclear licensing process --
11 is that we have mixed up the review process and the construc-
12 tion process, in a sense. You know, you walk into one of
13 these projects and ask for an application on the basis of
14 preliminary design in a period when there is a good deal of
15 thinking on the part of the government of just what the safety
16 standards ought to be, you end up sort of with the plant
17 half built and the standards change. And these are the kinds of
18 things you have been complaining about. From the point of
19 view of the safety reviewers, this also creates a problem
20 because you end up with the opposite situation, which is the
21 thing is built and it is very awkward to impose new require-
22 ments.

23 It cuts two ways. I think that the direction of
24 this report and one of which I think there is some agreement,
25 is that this will get away from building a plant while still

1 worrying about what it ought to look like, and whether it is
2 going to be approved. And that seems to be an important
3 step forward, to try to disentangle those kinds of activities.

4 And I think that is taking place. I think it
5 deserves support.

6 MR. WARD: Oh, it certainly deserves support. We
7 do support it.

8 The backfit problem ties in with the statement I
9 was making about an impact statements, that I think they have
10 to be used in making any changes, including changes to the
11 regulatory guides, or issuance of regulatory guides.

12 And we have seen two or three of the value impact
13 statements that have been issued with the regulatory guides,
14 and they really have not been very good, good pieces of work,
15 particularly as far as the impact goes, as far as the cost
16 goes. This is true for the one on fire protection; it is
17 true on the one on cranes. The Staff does not have the
18 facility to assess the costs of a lot of the changes they
19 are making.

20 And I think that there needs to be an educational
21 process, possibly interaction with industry; certainly my
22 committee and others in industry would be happy to support
23 that kind of an effort, to bring the costs into focus.

24 Well, let me make two more points. I got side-
25 tracked from my comments, but I am happy to answer your

1 questions.

2 The other point comes on discipline with the Staff.
3 We have seen a change in the way the Staff operates, from a
4 project team to a gathering of technical branches. In fact,
5 I have used the term, "the tyranny of the technical branches,"
6 is what we are in right now.

7 The project manager is not the strong man, not
8 providing perspective, not controlling the review and not
9 resolving dissention.

10 And particularly with the open policy now where the
11 Commission has asked that dissenting views be considered,
12 there needs to be a strong decision-making process to resolve
13 that dissention and not merely highlights it and carries it
14 through the hearing process. It needs to be resolved.

15 I also suggested in my talk in San Francisco that
16 early identification of issues, which o2-92 also supports
17 and supports well, that the intervenor bring -- be allowed
18 and in fact required, to bring his technical issues to the
19 fore while the technical review is in process. And those
20 technical issues should be resolved by the Staff during the
21 technical review, not the political issues, but the technical
22 issues, the safety issues. I think that would be helpful.

23 Then the hearing board would be presented with a
24 technical review of the intervenor and the Staff's technical
25 issues. That would make that -- or I think that is important.

1 The final point -- and I make this every time I
2 can -- there needs to be a goal for regulation. There needs
3 to be a target to shoot at. And whether that target be a
4 number, or whether it be a general perception of safety,
5 and then a studied and careful system for making changes to
6 that general perception, that has to be decided.

7 But I do think the Staff needs something to shoot
8 at in their technical reviews without this constant quest for
9 the safer and safer and safer plant.

10 COMMISSIONER GILINSKY: That is one I will agree
11 with you on.

12 MR. WARD: That completes my presentation.

13 MR. PARKER: Mike?

14 CHAIRMAN HENDRIE: Go ahead.

15 MR. MILLER: Thank you, Mr. Chairman.

16 I approach my subject with a good deal of diffi-
17 dence, since I have chosen to bring before you the manner in
18 which the Atomic Safety and Licensing Boards conduct public
19 hearings. It is a sensitive one for a practioner such as
20 myself, who represents public utilities before licensing
21 boards and the NRC generally.

22 I have to say that these are purely observations.
23 This isn't sour grapes on behalf of any client and doesn't
24 represent the views of any client.

25 It is, however, tempered by my own experience,

1 which includes not only practicing before the Nuclear Regula-
2 tory Commission but before state and federal courts and a
3 variety of state and federal administrative agencies on a
4 fairly regular basis.

5 Now, having made all those disclaimers, I will go
6 on to say that in my estimation, the performance of the
7 Atomic Safety and Licensing Boards is not consistent, and it
8 is not consistently high, even given that there is going to
9 be some inevitable variation among individual who are called
10 upon to exercise judgment in a situation such as that.

11 That conclusion is based both on my personal ob-
12 servations from an advocate's standpoint, and a review of
13 licensing board and Appeal Board decisions.

14 That review also suggests that perhaps some of
15 the problems are addressable.

16 First, --

17 COMMISSIONER BRADFORD: When you tossed in the
18 Appeal Board there, had you meant to include them in every-
19 thing or just their decisions as to the quality of the --

20 MR. MILLER: No. I should add that I have a
21 very different perception of the Appeal Board and its approach
22 to the problems which are presented to it for adjudication.
23 That is, I think it does an extremely conscientious and
24 thorough job. I don't always agree with the results, of
25 course, but notwithstanding that, I think it operates at a

1 very different level than the licensing boards do in most
2 cases.

3 The first observation that I would like to make
4 which I think supports my general conclusion, is I think that
5 the chairmen, the men who are appointed as chairmen of the
6 licensing boards, in large measure have inadequate knowledge
7 of the technical issues which are presented to them. That is,
8 I don't know that they -- I don't think that they understand
9 the technology or the critical environmental factors that are
10 going to be before them for decision.

11 This leads them in some instances when disputes
12 are brought before them for resolution, to rely on the tech-
13 nical members of the board for such things as relevance,
14 materiality and certain factual matters. And the technical
15 members of the board themselves lack some legal background
16 which enables them to make a technical-legal judgment, if
17 you will, as to the relevancy, materiality, of these matters.

18 What this leads to is irratic and inconsistent
19 approaches to an evidentiary record.

20 COMMISSIONER GILINSKY: May I ask you.

21 MR. MILLER: Yes.

22 COMMISSIONER GILINSKY: Do you think that the idea
23 of a board, a three-man board, is a reasonable idea, or --

24 MR. MILLER: Yes, sir; I do.

25 COMMISSIONER GILINSKY: So it is really the way it

1 has been implemented or carried out?

2 MR. MILLER: I think so, because I think that the
3 notion of having a trained expert in radiological health and
4 safety matters on the one hand and an environmental expert
5 on the other, is really a very sound idea and one which should
6 contribute to a very good evidentiary record. And when boards
7 are functioning well, they really do shape the issues that the
8 parties are to address in a very knowledgeable and informed
9 way. And it leads, I think, to a good process; that is, the
10 concerns which ought to be addressed are addressed. That is
11 when it is working well.

12 But, because of these lacks that I have observed,
13 I think that what you find is that some matters which are
14 clearly pertinent to the decision making process are arbit-
15 rarily excluded. The opposite approach is for the licensing
16 board chairmen to say: Well, we will let it in for what it
17 is worth, which leads to an over-burdened record. And I have
18 to add that it seems to me that licensing boards treat inter-
19 venors, represented by counsel, much more gingerly than they
20 treat licensees, public utilities and the NRC regulatory
21 staff.

22 In some cases, the chairmen themselves seem to
23 lack familiarity with the evidentiary rules and with the
24 manner in which a hearing should be conducted; in other words,
25 what it takes to be a judge, if you will.

1 This leads to another problem; that is, the cali-
2 ber of some of the written decisions is not good. The Appeal
3 Board in Seabrook admonished the licensing board over its
4 failure to make subsidiary findings on contested pieces of
5 evidence and even to discuss these conflicts, much less re-
6 solve them.

7 This leads again to burdens on all the parties, be-
8 cause we are all asked to prepare draft findings of fact
9 and conclusions of law for the licensing board, and we kind
10 of assume, on the basis of what the Appeal Board has told us
11 on a number of occasions, that we really do have to get down
12 to the nitty-gritty and almost deal with every bit of con-
13 tested evidence in the draft findings which we present to the
14 licensing board.

15 They are then confronted with masses of pieces of
16 papers presented by the parties and are required, then, to
17 pick and choose, if you will, and hopefully exercise some
18 individual initiative in making their own decisions.

19 I think if the overall quality of the decisions
20 were better, that you wouldn't find these kinds of stringent
21 requirements being imposed by the Appeal Board.

22 And the Appeal Board discipline of licensing boards
23 is really not a satisfactory way of dealing with the situa-
24 tion:

25 First of all, it can lead to the electric utilities

1 or intervenors or any party who appears before a licensing
2 board being penalized; that is, having the proceeding remanded
3 for further findings, or whatever.

4 One of the things that I would like to suggest is
5 that perhaps there ought to be a more extensive training pro-
6 gram. My perception is that the program for qualification and
7 training of panel members is somewhat limited. There may be
8 a list of suggested readings and an occasional seminar.

9 I think that the lawyer members of the panel ought
10 to be required to attend a series of lectures or seminars on
11 the basic technology of a nuclear plant, as well as the environ-
12 mental factors that are likely to be brought to their atten-
13 tion.

14 Now, this raises some problems in a technical
15 sense about conflicts and talking to people who may later
16 appear before them as witnesses, but I believe those could
17 be resolved.

18 I think that at another level a knowledge of basic
19 evidentiary rules, conduct of a hearing, ought to be a subject
20 for training of all members of the panel. The Federal Rules
21 of Evidence were adopted within the last few years. They are
22 used in the federal district courts and have been followed
23 by many state courts. They are comprehensible, it seems to
24 me; they are relatively simple. And I think they could lead
25 to an expedited licensing process, at least insofar as the

1 hearings go. And I think that if people know about these
2 things and if the nonlawyer members, at least, have some
3 rudimentary familiarity with them, it may expedite the hearing
4 process.

5 I think that records will become more comprehensi-
6 ble, and this really should lead to a better quality of
7 written decisions by the licensing boards themselves.

8 I should add that there is precedent for this
9 type of approach, I think, at both the federal and state
10 levels; the Judicial Conference of the United States of the
11 various circuits has been established by statute. There are
12 institutes on sentence at which judges come together and dis-
13 cuss the criteria that will guide them with respect to the
14 imposition of sentences in criminal cases.

15 Some states have extremely formal sessions for
16 new judges, which teach them how to be judges; how to call
17 the balls and strikes, if you will. I don't know that any-
18 thing that detailed is necessary, but it is something that I
19 think deserves your attention, because this aspect of the
20 licensing process is one which, it seems to me, the Commission
21 itself is somewhat removed from in the conduct of its other
22 responsibilities.

23 The other subject that I would like to touch very
24 briefly on, because I see we are almost out of time, has to
25 do with a matter of water quality technical specifications.

1 This is quite a different subject.

2 As I am sure this Commission knows, this is a
3 matter which is clearly within the scope of the responsibility
4 of the federal EPA and the states. Mr. Case recently sent a
5 letter to the Carolina Power and Light Company, I believe,
6 in which he said that on an experimental basis, I believe, make
7 an effort to remove some of the redundant reporting require-
8 ments which are at present in the technical specifications.

9 This is a process that ought to be expedited.
10 In at least one instance of which I am aware, there are no
11 state and federal requirements for monitoring of water quali-
12 ty parameters. Nonetheless, the NRC tec specs require it.
13 The data is thus assembled and reported to an agency which can
14 do nothing with it when the agencies that are responsible
15 and presumably have the authority to do something with it,
16 don't care to receive it.

17 I just urge that the process of eliminating this
18 kind of overlap which is very expensive, I think, for the
19 utilities and must be for the agency as well, be eliminated.

20 Thank you.

21 CHAIRMAN HENDRIE: Thank you.

22 (Pause.)

23 CHAIRMAN HENDRIE: That is very precisely done from
24 a time standpoint. I congratulate you.

25 MR. PARKER: That is the end of our formal comments.

1 CHAIRMAN HENDRIE: I wish that this Commission's
2 affairs could proceed generally in as orderly a fashion.

3 (Laughter.)

4 MR. PARKER: Mr. Walske can take a minute and a
5 half, if you have a minute and a half left. I will devote
6 it to questions if you have questions.

7 CHAIRMAN HENDRIE: Well, let's see if there are
8 a couple of questions. Maybe we can do both.

9 (No response.)

10 CHAIRMAN HENDRIE: Shoot.

11 MR. PARKER: You have two minutes, Carl.

12 MR. WALSKE: My remarks are very brief.

13 But I thought something should be said about the
14 question of proliferation and the work that we do at the
15 Atomic Industrial Forum on it. We have a number of groups
16 that participate, and I personally am involved rather directly
17 with most of them.

18 And we don't often get together and talk and
19 therefore, while you are all together, I thought I should assure
20 you that there is deep interest in the proliferation
21 problem in industry, in preventing proliferation; not in
22 promoting it.

23 And at the same time that I say that, it is only
24 common sense to understand that throughout the industry,
25 there are a lot of different view points on any given problem,

1 and that includes proliferation.

2 And therefore, you can't listen to every voice and
3 say: Well, that's the voice of every one. That includes my
4 own voice.

5 But at the same time, I want to assure you again
6 that there is a deep interest. Now, there is a difference of
7 views generally held between what you might call the nuclear
8 industry or nuclear establishment in this country and the
9 Administration.

10 But I believe that it is an honestly held differ-
11 ence of view that centers around the question of how much
12 value, how much reliance you can put on the denial of the
13 utilization of plutonium, or the denial of reprocessing as
14 a mechanism, and technical mechanism for slowing or halting
15 proliferation.

16 And I think that difference of opinion can be
17 summed up that in the nuclear establishment, there is a strong
18 feeling that technical barriers won't go very far in dealing
19 with the proliferation problem; that our main reliance has
20 to be on political and institutional arrangements and that
21 to the extent that we don't get on with the job of making
22 the necessary political and institutional arrangements, while
23 we look for ways more or less exclusively of pressing the
24 technical type barriers, we will be doing ourselves a dis-
service and we may lose the opportunity that we have now to

1 make some real progress in coping with proliferation.

2 But again, the interest is sincere, just as sincere
3 as the interest in the Administration, I can assure you. But
4 the perspective is honestly different.

5 Thank you.

6 MR. PARKER: Mr. Chairman and Commissioners, we
7 thank you, and put it back to your side of the table.

8 CHAIRMAN HENDRIE: Well, we appreciate very much
9 your coming. I think the Commission understands the thrust
10 of the remarks across the table very well.

11 I doubt that each of us would have put the matters
12 as precisely as you have put them, but that is to be expected.

13 We understand and wish you well. I think it is
14 an important enterprise and we wish you well.

15 (Laughter.)

16 MR. PARKER: Thank you very much.

17 CHAIRMAN HENDRIE: Thank you.

18 MR. PARKER: We wish you well.

19 (Laughter.)

20 (Whereupon, at 2:34 p.m., the hearing in the
21 above-entitled matter was adjourned.)
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