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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

PUBLIC MEETING

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

SUBCOMMITTEE ON FIRE PROTECTION

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

Wednesday, July 9, 1980

The Committee met, pursuant to notice, at 1:10 p.m.

BEFORE:

M. BENDER, Presiding

J.J. RAY

J. EBERSOLE

C. SIESS

ALSO PRESENT:

GARRY G. YOUNG

P.S. TAM

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P R O C E E D I N G S

(1:10 p.m.)

MR. BENDER: This meeting will now come to order.

This is an open meeting of the Advisory Committee on Reactor Safeguards, Subcommittee on Fire Protection. I am Mike Bender, Subcommittee chairman. The other ACRS members today are Mr. Jesse Ebersole on my left, Mr. Jerry Ray on my right, and Dr. Siess will probably be joining us later.

The purpose of this meeting is to discuss the proposed NRC role on fire protection for nuclear power plants operating prior to January 1, 1979, and acquire information for the Committee's comments to the Commission.

This meeting is being conducted in accordance with the provisions of the Federal Advisory Committee Act and the government in the Sunshine Act.

Mr. Peter Tam is the designated federal employee for this meeting. Also attending is a representative of the ACRS staff, Mr. Garry Young.

The rules for participation in today's meeting have been announced as a part of the notice previously published in the Federal Register on June 24, 1980. A transcript of the meeting is being kept, and it is requested that each speaker first identify himself or herself and speak with sufficient clarity and volume so that he or she can be readily heard.

We have received written statements and requests for

1 time to make oral statements from representatives KMC and the
2 Edison Electric Institute. These statements have been included
3 as part of the schedule for this meeting.

4 You can find copies of the schedule at the doorway. It
5 has been posted out there, has it not?

6 Let me remind the subcommittee that the purpose of this
7 meeting is to discuss the proposed fire protection rule and to
8 acquire information for the Committee's comments to the Commission.
9 Specific comments will be discussed at the end of this meeting
10 for the purpose of developing a position that can be presented
11 to the full committee.

12 Prior to getting started let me ask if the subcommittee
13 members want to make comments. I would like to remind you that
14 we decided not to have consultants to this meeting because of the
15 restrictions on the NRC budget for ACRS purposes in connection
16 with travel; and so consultants which would normally be here to
17 present a more complete view of ACRS concerns and interests is
18 lacking. However, the subcommittee members have been apprised
19 of what the consultants are thinking, and hopefully we will be
20 able to deal with their comments.

21 I see no reason why the comments of the consultants cannot
22 be put in the public record.

23 Jesse, do you have any comments?

24 MR. EBERSOLE: No comments.

25 MR. BENDER: Jerry?

1 MR. RAY: No.

2 MR. BENDER: Chet, do you have anything you would like
3 to introduce?

4 MR. SIESS: No, thank you.

5 MR. BENDER: In connection with this meeting we have
6 asked the regulatory staff to update us on what the content of the
7 rule is intended to do and to draw attention to things in the rule
8 that are not currently covered by the branch technical position,
9 9.5-1.

10 I think it might be useful to just remind the subcom-
11 mittee of some concerns which the ACRS has had in the past about
12 the fire protection problem. We have always agreed with the
13 staff that there was the need for a good fire protection program.
14 There has never been any question about that.

15 There has been considerable concern about whether the
16 branch technical position was suitable for a regulatory guide
17 because it was not very definitive.

18 My own experience in recently reviewing that guide has
19 not led me to change my view that it is a long way from being what
20 we think belongs in a normal regulatory guide. Some of us I think
21 may find ourselves equally concerned about making a law out of
22 something that would not make a good guide, so we are anxious to
23 hear how the staff proposes to use the rule and how it will use
24 the branch technical position in connection with the rule to
25 bring about what is thought to be a more orderly kind of regulatory

1 operation.

2 I do not read into the rule more than just a need to
3 improve the regulation, but maybe we will hear more on that.

4 Garry, what is the first thing on the agenda? Do we
5 hear first from the staff?

6 MR. YOUNG: Yes.

7 MR. BENDER: Bob, are you going to be the spokesman?
8 We will let you have the first blow then.

9 MR. FERGUSON: I am Robert Ferguson. I am with the
10 Chemical Engineering Branch of the Office of Nuclear Reactor
11 Regulation. Currently I am responsible for improvising the
12 staff's -- I am responsible for supervising the staff's evaluation
13 of fire protection programs in nuclear plants.

14 For the last three years I have been more associated
15 with the operating plants and just since the recent reorganization
16 associated with the review of upcoming OLs and CPs.

17 The Committee has asked for us to give a brief presenta-
18 tion on the background for the proposed rule, a comparison of
19 the requirements with those in Appendix A for branch technical
20 position 9.5-1, and the impact of the rule on current SER commit-
21 ments.

22 Back before the Browns Ferry fire, the regulations
23 consisted of General Design Criteria 3 in Appendix A to Part 50
24 which essentially said that you ought to look at what fires and
25 fire protection suppressants can do to safety-related systems

1 and see that neither fires nor the suppressant cause any particular
2 problems.

3 The staff review was not too extensive. Most of it
4 relied on all the plants had to be insured and were covered by
5 fire insurance companies and so forth, and it was thought that
6 that was adequate at that time.

7 The Browns Ferry fire occurred, and subsequently a
8 special review group was appointed to study what could be learned
9 from that fire. The special review group reported that they did
10 not think too much of the staff's method of evaluation, the fire
11 protection programs in the plant, nor the guidelines the staff
12 had issued with regard to fire protection programs in the plant.

13 There were about 57 recommendations all told coming
14 from that report. Those that were pertinent to nuclear power
15 facilities were reduced to guidelines and published in branch
16 technical position 9.5-1. The same technical information was put
17 into Reg Guide 1.20 and subjected to public comment.

18 It was discussed with this committee, and I'm not sure
19 that we really discussed it with the full ACRS, but at least this
20 committee. After the public comment period it was again discussed
21 with the committee.

22 At that time the subcommittee expressed its view that
23 it did not think it should be published as a regulatory guide. As
24 a result, it is still out for comment.

25 The second comment period has ended, and we are in the

1 process of doing something with those comments. Just where we
2 will go I think is not clear to me right now.

3 Subsequent to issuing the branch technical position we
4 issued an Appendix A to that position. The branch technical
5 position was based on taking the Browns Ferry review group recom-
6 mendations and applying them to a new plant, and saying if we
7 had all our desires and a clean piece of paper, this is what we
8 think should be done.

9 Appendix A was saying well, we have plants that are
10 operating, that are in late stages of construction. You cannot do
11 everything with those plants that you may want to do with a clean
12 sheet of paper. Therefore, there should be some alternatives.

13 We tried to eliminate requirements we did not think were
14 necessary. We proposed alternatives and certainly left the option
15 for any alternative that licensee proposed, to be evaluated on a
16 case-by-case basis to establish what we felt was an adequate
17 program.

18 As we asked the licensees to compare their plans to
19 these guidelines and as they came in, we found we were not getting
20 analysis on the effects of fires; so we published supplementary
21 guidance on what we thought was necessary to evaluate the effects
22 of fires and fire suppressants on the plants, and that was
23 published in late 1976.

24 Subsequently we published other things-we felt necessary
25 in order to provide additional guidance to resolve these problems.

1 One was sample technical specifications, a document on administrative
2 control, fire brigade training, fire strategies and so forth, man-
3 power requirements for fire brigades, the use of security and
4 fire people for fire brigade and security work and so forth, numer-
5 ous staff positions wherever we could.

6 We tried to resolve things on a generic basis or an
7 issue in a similar way on all plants where we felt a similar condi-
8 tion existed. And around December of 1978, by that time we had
9 published an SER on each plant. We had visited the plant. We had
10 discussed all this guidance with the licensees. A number of them
11 we had reached the conclusion and an implementation schedule for
12 modifications that were required. In some cases there were dis-
13 agreements between us and licensees on a particular subject.

14 To sum up all the SERs, there were a number of open
15 items, about 530. About half of these were not open items in the
16 usual sense, being disagreements between us and the licensees.
17 There were agreements between the staff and the licensee. The
18 only thing that wasn't provided at that time by the licensee was
19 a detailed design description. In other words, the licensee may
20 decide he is going to put a fire barrier in this particular room.
21 He just had not designed it yet. The only open part was he was
22 to do the design and send in the design prior to making the
23 modification.

24 The other half of the open items, about 250 of them,
25 were simply items that were incomplete in the original one. Perhaps

1 the licensee did not look at four or five areas where after looking
2 at the plant we thought he should, and he would go back and do that.
3 In some areas perhaps we did not think he did as good a job as he
4 should have. It was that sort of thing. In some places they had
5 not analyzed the effects of fires on safe shutdowns, so they were
6 doing that all over.

7 They had agreed to do it, and it is still a matter of
8 looking at the results of those evaluations and deciding what
9 modifications, if any, are necessary. The remaining 100 or so were
10 involved with about 17 issues, and where there were disagreements
11 between the staff and the licensee -- I mean, we knew what he was
12 saying, he knew what we were saying; we just did not agree.

13 In order to resolve these issues we had two choices. We
14 had to issue an order or prepare a rule. First of all, though, we
15 had to decide is the area of disagreement a minimum requirement
16 to meet General Design Criteria 3. So we had a review group
17 within the Office of NRR which looked at each one of these items
18 to decide whether they were or were not in their opinion a minimum
19 requirement to meet General Design Criteria 3.

20 We decided they were, and we decided we were going to
21 pursue it further. These then were incorporated into this rule,
22 eventually sent to the Commission and affirmed by the Commission
23 as being minimum requirements to meet that.

24 MR. BENDER: I see the fire brigade has arrived.

25 (Laughter.)

1 MR. FERGUSON: That is about where we are. When we
2 got the Commission's comment back on the rule to publish the rule,
3 they asked us to expeditiously inform the licensees, to obtain
4 the comments of the ACRS on it, to get back to them as soon as we
5 can with the solution of public and ACRS comments.

6 They also added two things in there which are causing
7 quite a bit of concern. One was that they added a requirement
8 that all plants, all operating plants -- and this is limited to
9 operating plants -- that were operating prior to January 1, 1979
10 would meet the requirements of the rule in its final form, all
11 requirements of the rule in its final form. The other was it set
12 specified dates by which the modifications would have to be modi-
13 fied.

14 Some of these dates contradicted things that were
15 already made license conditions or agreements between the staff,
16 and particularly the SEP plants.

17 Again with regard to the intent of the rule, the intent
18 when we sent it to the Commission was to establish these particular
19 things as minimum requirements to meet GDC-3, which would be used
20 to resolve the open issues on the plants where there were disagree-
21 ments between us and those particular licensees. In some cases
22 this has already been done. Some licensees have thought about it.
23 This is the Commission's statement on the subject, and they want
24 ahead and did it. In other cases these still remain issues between
25 us and certain licensees.

1 With regard to the differences between the requirements
2 of the rule and the guidelines of Appendix A, the first three
3 items -- let me go back again to the rule itself. One way if
4 we say there are 17 or 18 issues, maybe you say why isn't the rule
5 just 17 or 18 sentences which take care of those things? And we
6 found it necessary to put in a few more words to try and make the
7 thing coherent and show how these particular requirements fit
8 into the overall picture.

9 In Section 3 of the rule we list specific requirements
10 which are those we feel we need in order to resolve those issues
11 where there are disagreements between us and certain licensees.
12 The first three of these are almost -- not direct quotes but cer-
13 tainly they are the same requirements that are in Appendix A.

14 Those items listed from D, and skipping E, but F through
15 P are requirements that are in Appendix A. However, we have stated
16 some specific requirements in the rule which go along with putting
17 a bottom line on the minimum requirements of that intent.

18 For instance, on the fire brigade maybe in Appendix A
19 there is at least an implied requirement for a fire brigade. The
20 issue between us and the licensee is how many people are going to
21 compose the fire brigade, and the rule would say that there has to
22 be five people. It is that type of specifics that the rule is
23 attempting to get documented so we can use them to resolve open
24 issues.

25 MR. BENDER: Have you ever stated the rationale for five

1 people?

2 MR. FERGUSON: Yes, sir. I think many times each licensee
3 was sent a position. We had many discussions with a number of
4 licensees. We had discussions with KMC and a group of licensees
5 they represent. The final staff position or our whole argument
6 was included in a SECY paper that went to the Commission. That
7 particular position I believe was sent to all the licensees, trying
8 to convince them just on a letter basis that they should be upgrad-
9 ing their fire brigade to five people.

10 MR. SIESS: Why do you think so many licensees disagree
11 with your number of five?

12 MR. FERGUSON: In the beginning or now?

13 MR. SIESS: Presumably they still disagree or there would
14 be no need for a rule.

15 MR. FERGUSON: Right now we are down to two licensees.

16 MR. SIESS: You have two people who have not agreed to
17 five or have agreed to provide five?

18 MR. FERGUSON: Right.

19 MR. SIESS: Whether or not they think five is necessary.
20 And the rule is being written for those two people then.

21 MR. FERGUSON: Essentially in that particular area, yes.

22 MR. SIESS: How few would you consider before you would
23 not write a rule? One? I am sure at zero you would not.

24 MR. FERGUSON: I would agree with the zero. With one,
25 to me it is a management decision. It is the same -- in any job you

1 take up you come out with an S-curve where you are slow to start
2 off, and we are in the last 10 percent. The question is where
3 you want to cut off.

4 MR. SIESS: Do you think --

5 MR. FERGUSON: What I feel, if there was one utility
6 that did not agree with it, I think it should be written so you
7 would get five people there and they say there. I think it is
8 necessary.

9 MR. SIESS: You think rulemaking is the way to do this.

10 MR. FERGUSON: My personal feeling on fire protection
11 rulemaking, I think rulemaking should be used to establish the
12 fire protection requirements for nuclear plants across the board,
13 not a regulatory guide, because fire protection is not something
14 which is site specific. It requires design features in the plants
15 to reduce the dependence on various questionable schemes, and I
16 think rulemaking is the way to do it for the future, for new plants
17 coming along so designers know what they have to do and can start
18 out with a blank piece of paper and do it right.

19 MR. SIESS: In other words, you would think the rules
20 should provide essentially the guidance to a designer that normally
21 we would expect a code to provide.

22 MR. FERGUSON: Yes, sir.

23 MR. SIESS: How far do we extend this now?

24 MR. FERGUSON: In what way?

25 MR. SIESS: Well, right now I can read the rules, and I

1 do not find this kind of detailed guidance in every aspect of
2 design of a nuclear power plant; and if we are going to make the
3 rules in Part 10 substitute for such things as standards and
4 codes, I think the ACRS is very interested in hearing from a
5 fairly high level in the regulatory staff that that is the intent,
6 somebody behind --

7 MR. FERGUSON: Let me clarify one thing here. You asked
8 me a question, and I am answering on a personal basis. I'm not
9 answering it on the basis that I'm speaking for NRC.

10 MR. SIESS: You are addressing the NRC as a spokesman
11 for the NRC staff.

12 MR. FERGUSON: If you are asking me -- I took it as a
13 personal question, sir.

14 MR. SIESS: Only in cases of professional disagreements
15 do I address people as individuals.

16 MR. BENAROYA: I want to make it pretty clear --

17 MR. BENDER: Let Mr. Ferguson finish his statement.

18 MR. SIESS: Let me go back a step.

19 MR. FERGUSON: Let me go back to the original question.
20 I believe I got off on personal opinion rather than staff opinion
21 when you said how many people does it have to be before it goes
22 that way. From my point of view I cannot answer that, sir.

23 MR. SIESS: Let me ask you another question. You are
24 down to tv. utilities or applicants that have not accepted the
25 staff position on a five-man fire brigade. Do you think that you

1 convinced them that five was the right number, or were they simply
2 convinced that five was what they had to have in order to get a
3 license?

4 I have read quite a bit of the correspondence between
5 the staff and the applicants, a lot more than I care to read, and
6 I found very strong, persuasive arguments on both sides. I think
7 the staff had some good arguments for five, and I saw licensee
8 arguments that I thought were pretty good arguments for less than
9 five. So there were differences of opinion.

10 MR. FERGUSON: Yes, sir.

11 MR. SIESS: I am not convinced because there are only
12 two people who still have those differences of opinion or there
13 are only two people who have not yet committed to five men in the
14 fire brigade that there are still not differences of opinion. And
15 I'm wondering if you have any feeling as to why there were differ-
16 ences of opinion, why were there so many people that thought less
17 than five was an adequate number?

18 Were they simply worried about hiring people and the cost
19 of producing power if they had to hire more staff, or was it an
20 honest professional disagreement? What was the source of this
21 argument?

22 MR. FERGUSON: I would say -- I would like to answer it
23 myself. I think there was an honest disagreement between some
24 people. Some people think three persons are perfectly adequate.

25 MR. SIESS: When you presented the arguments to the

1 Commission in favor of rulemaking, you presented the staff's argu-
2 ments in favor of five in the fire brigade, as you just indicated.
3 Did staff undertake to present the Commission with the other side
4 of the argument, since there is no comment period essentially for
5 this?

6 Normally in rulemaking the staff presents its arguments.
7 Then the people on the other side have 90 days. I think some
8 rulemaking has gone on for 90 months before they have closed it
9 out. They have had a chance to submit their arguments. But here,
10 as I understand it, either the staff or the Commission said this
11 has been all argued out. We do not need to hear any more arguments.
12 We will allow 30 days for comment; and of course, 30 days is
13 pretty close to nothing the way the system operates, the publica-
14 tion in the Federal Register and all that business.

15 MR. BENDER: While Bob is looking up what he is looking
16 up, do you want to make further comments?

17 MR. BENAROYA: I am Vic Benaroya from NRC staff. The
18 comment about having a rule is Bob's own feelings and not manage-
19 ment's. As to the five people, we made very clear again that
20 looking at the operating plants we are reviewing that the five
21 is a number that we think is fit for those plants, not for future
22 plants where we might have dedicated shutdown systems, automatic
23 systems, or different situations. The rule is only for the operating
24 plants under review.

25 MR. SIESS: Do you want to address some of the additional

1 parts of that question as the argument you have against five?

2 MR. BENAROYA: From what we understand, the reason for
3 five -- against five is because of the cost of training and the
4 number of people -- the turnover that is occurring at that level
5 of personnel in the plant. We are saying that some of these people
6 can be part -- those that are also part of security. I understand
7 the turnover of those people is very high, and the expense of
8 training these people in fire protection is getting to be big.

9 MR. SIESS: It seems to me that the probability of a fire
10 causing substantial monetary damage to a plant is a great deal
11 higher than the probability of a fire that has some bad effect
12 on the health and safety of the public.

13 Are you saying that the utilities agree with you that
14 five is the proper size for a fire brigade, but that they do not
15 feel like investing the money to protect their property at that
16 level of manpower?

17 MR. BENAROYA: No, I did not say that, Dr. Siess. I
18 could not say that because I do not know the workings of the utili-
19 ties. All I can tell you is what we are told. But looking at
20 the requirements for the operating plants we have today, the size
21 of the plant where the fires could occur, we feel we need five
22 people to have a safe fire protection group there.

23 MR. SIESS: And the utilities do not?

24 MR. BENAROYA: Some do, some don't.

25 MR. SIESS: Why do they think they can do it with less

1 than five when you and your consultants -- I think some very good
2 arguments, and you arrived at five.

3 MR. BENAROYA: The same goes for every item we had in
4 fire protection.

5 MR. SIESS: I realize that, but I am concentrating on
6 one.

7 MR. BENAROYA: It is the same reason. It goes for all
8 of these. It is a matter of choice as to what they think is neces-
9 sary for their own plant based on their own experience, sometimes
10 not understanding the problems we have in other plants.

11 MR. EBERSOLE: Is it possible that utilities have a
12 concern with five or even more than that, that the opportunity to
13 train these people in a discretionary sense so that they will not
14 do the wrong things -- I am looking at the reverse aspect of having
15 too many people aiming hoses all over the place, that they may
16 present a greater hazard with a larger number of lesser-trained
17 people regarding their attempts to fight fire with resultant
18 damage to equipment by flooding and other damage as an end result
19 of the fire mitigation process.

20 Is this one of their concerns?

21 MR. BENAROYA: You may consider that one, too. It is
22 true, because that has come up when we are discussing the user
23 water. On the one hand we are told don't use -- we are not going
24 to use water. We don't want sprinklers, so we won't use water.
25 And then the second one, we have a fire hydrant right outside just

1 in case there was a fire in that area. At least with a sprinkler
2 you have some kind of choice as to how many you have and the
3 selection of areas. With a fire hose the whole thing is going to
4 be blasted with water.

5 MR. EBERSOLE: I was bothered recently about the
6 Sequoyah startup and the statements made by the applicant there
7 that there was no training of either the operators or presumably
8 the plant fire protection crew in respect to having a knowledge
9 in a discretionary sense of where critical circuitry and apparatus
10 was located, so that they could be discrete in the application of
11 fire protection measures to stop fires.

12 In short, I got the impression -- and I hope you investi-
13 gate this -- that people will just come in and douse the whole
14 system and hope it will survive.

15 MR. BENAROYA: It is sure shocking to hear something
16 like that, to say the least.

17 MR. BENDER: Let me pursue your point a minute. I
18 think I heard you say that among the things you had agreed to in
19 order to get some understanding between the applicants and
20 licensees -- I guess they are all licensees in this particular
21 case.

22 MR. BENAROYA: Yes.

23 MR. BENDER: And the regulatory staff was that the
24 security staff would be part of the fire-brigade.

25 MR. BENAROYA: As many as two from security, yes, with

1 proper training.

2 MR. BENDER: Without intending to cast aspersions on the
3 capabilities of people in the security business, I have to argue
4 that they are not likely to be of the same technical caliber as
5 the operating staff. And it is all right to say "proper training,"
6 but I think assuming that an operator might likely be a member of
7 the security staff and they were interchangeable, I could concede
8 to the fact that they might equally be able to do the same job.
9 But I have to ask can I really be comfortable with the security
10 staff being part of the fire protection staff, if I think the
11 level of training that is associated with being a security man
12 is very much lower than that.

13 MR. BENAROYA: They still have to meet the minimum
14 requirements for fire protection training.

15 MR. SIESS: That is training in how to put out fires.

16 MR. BENAROYA: No, no, no, sir.

17 MR. SIESS: Is it training in where the critical parts
18 of the system are?

19 MR. BENAROYA: Hopefully we have a lot of class instruc-
20 tion. We have gone through a lot of detail, much more so than
21 details, so that we could clarify those things, and that's where
22 we have been characterized. We have gone into too much detail
23 in defining responsibilities and training requirements. On the
24 one hand we are told that this is the utility's option as to how
25 much training they have to have, and you tell us the guidance, which

1 in this case it is quite clear. When you say fire protection, he
2 has to know how to get the plant to shutdown. Really that is the
3 key more than just --

4 MR. SIESS: Not necessarily. You want to get the plant
5 so it can shut down if it has to.

6 MR. BENAROYA: From our point of view that is the key.

7 MR. SIESS: When you open the door to being proscriptive
8 it is almost impossible to stop before you have been proscriptive
9 about everything. If you are going to tell people what to do,
10 and how to do it, and who to do it with, the more proscriptive
11 you are, the more proscriptive you have to be.

12 MR. BENAROYA: Dr. Siess, that is the unfortunate thing.
13 We have to find a balance between what you are saying and what
14 Mr. Ebersole just said.

15 MR. EBERSOLE: You are driven into being proscriptive
16 by inadequate performance. You have to find somewhere between.

17 MR. BENAROYA: First we went through General Design
18 Criteria 3. We did not go beyond that. When the Browns Ferry fire
19 occurred, we realized General Criteria 3 was not adequate. We
20 tried to get a branch technical position. Now we see that is not
21 enough for some of the plants, so we are going to Appendix R to
22 delineate a little bit further what is necessary so we can finish
23 once and for all.

24 Five years have gone by since the Browns Ferry fire,
25 and we are still arguing what the requirements are. To us on the

1 staff it is quite clear the lessons we have learned from that.
2 We are trying to get this across.

3 MR. SIESS: You mentioned five years. Considering the
4 lessons learned from Browns Ferry, what percent of those do you
5 think have been implemented in those five years?

6 MR. BENAROYA: A great deal, fortunately.

7 MR. SIESS: That gives me some comfort. I did not want
8 to think that five years had passed, and we did not learn anything.

9 MR. BENAROYA: We have very few utilities where they
10 could do a lot more, they should have done a lot more, very few.
11 The others have done as much as they can. Their best effort is
12 going on. It takes time to develop the design, the engineering,
13 the installation. There are very few where we are having problems.

14 MR. BENDER: If there were not the concern about training
15 of the fire brigade would the licensees have other concerns about
16 the size of the brigade?

17 MR. BENAROYA: We have not heard any comments.

18 MR. BENDER: That is the only one?

19 MR. BENAROYA: You can ask industry. Maybe they can
20 shed some light on this.

21 MR. BENDER: Recognizing there are only two licensees
22 that have not made commitments, I suspect you either have had
23 concession or it is not worth arguing about, which I am sure
24 some fraction of it happens to be.

25 The two licensees that have not committed, who are they?

1 VOICE: They are Florida Power and Light with Turkey
2 Point 3 and 4, and Northeast Utilities with Millstone 1 and 2, and
3 Hadam Neck. The licensee is actually Conn Yankee, but we deal
4 with the same service organization.

5 MR. BENDER: Do we have statement from Northeast Utili-
6 ties today? We will hear from them. We will find out what their
7 viewpoint is directly.

8 Go ahead, Bob.

9 MR. FERGUSON: I would like to respond back to Dr.
10 Siess' question which essentially was did we inform the Commission
11 of what the licensee's arguments were. In the SECY paper that
12 went forward, Enclosure D of that was our staff position on the
13 minimum size of the fire brigade. It was about a 20-page paper.
14 There was an Appendix A to that which summarizes three, as we
15 feel it, the most prominent arguments that the licensees have
16 made.

17 One is historical fires have been small, have usually
18 gone out by themselves, and have not caused too much trouble. They
19 have been very easy to put out.

20 Site assistance: most utilities have agreements with
21 offsite fire departments, plus they also have the off-duty fire
22 brigade people who live somewhere within the area of the plant
23 and have a callback system and so forth, and they can get these
24 people back in in 20 minutes or a half hour, sometimes they say
25 five minutes, 10 minutes, take your choice.

1 And then the other is availability of onsite personnel.
2 Essentially, though, this goes to -- during the day shift we have
3 plenty of people around. We don't have to worry about five people.
4 The hard part is the night shift and the weekend shifts. And then
5 we say well, there is not as much activity, so we really do not
6 need as many people there.

7 Our argument basically is the fire can happen any time.
8 The worst fires usually happen at the worst time.

9 MR. BENDER: Bob, could you go on and cover the other
10 differences, the things that have come up as part of the rule
11 that were not --

12 MR. FERGUSON: I got down to section three. There are
13 really three groupings. I mentioned the first two. The third
14 grouping is a grouping that is really implied from Appendix A.
15 One is associated circuits, and the other is the hydrostatic
16 hose ducts.

17 We went to the specifications, the technical specifications,
18 and obviously you have to set a test frequency and a pressure you
19 are going to set the testings at on the associated circuits. There
20 have been a lot of comments that this is a brand-new item, and
21 nobody ever heard of it before and that sort of thing. It is
22 probably true under that particular heading. However, it goes
23 back to NUREG-0050, the special review group report where they
24 said the review group recommends where there are interactions be-
25 tween safety equipment and non-safety circuits such as indicator

1 light circuits, the adequacy of isolation should be assured.

2 In Appendix A in the design basis we said a general
3 statement again. The overall fire protection program should be
4 based on an evaluation of potential fire hazard throughout the
5 plant and the effect of postulated design basis fires relative
6 to maintaining the ability to perform safety shutdown functions.

7 It would seem to me that associated circuits have to
8 be considered when you start talking about what effect fires are
9 going to have on equipment in the area.

10 MR. BENDER: Conceding that they are implicitly required,
11 have you established in your mind that all of the plants that have
12 been licensed up to now comply with the rule, or if not, those
13 that do not comply, do they not comply because you have had a
14 direct disagreement with the applicants?

15 MR. FERGUSON: On associated circuits?

16 MR. BENDER: Yes. I don't know how far I ought to go
17 with this, but let's ask about associated circuits.

18 MR. FERGUSON: Just taking that, this is one in which
19 our position as it is now was not really developed until the late
20 stages of the review, so there are some plants where perhaps the
21 question was not raised explicitly. It is not clear whether the
22 shutdown analysis on those particular plants is all finished yet
23 or not, but I am sure there are probably one or two where it has
24 not been raised explicitly, and probably the hazards analysis
25 writes it off as being all right.

1 MR. BENDER: Have you told the Commissioners that you
2 are planning to go back and after this rule is accepted, if it
3 is, that you are going to go back and go through each plant and
4 see whether the plants comply with the rule as opposed to the
5 branch technical position which you already approved?

6 MR. FERGUSON: I think this is one area where it has
7 been the other way around, where the comments from the Commission
8 told us to do that. This is a disagreement.

9 MR. BENDER: I guess I do not understand that statement
10 but go ahead.

11 Vic, do you have a comment?

12 MR. BENAROYA: Our recommendation would be that any
13 item that meets the Appendix A branch position 9.5-1, if it has
14 been approved, we don't start going back and looking at it again.
15 By the time we finish that, the implementation dates will be
16 delayed, which is more important; so we do not think it is worth
17 looking at this. We will bring this up again with the Commissioners.

18 MR. BENDER: Is that consistent with what Bob just said?
19 I am not trying to start a disagreement. I want to see whether
20 it is. Whether what was said just now is the same as Bob intended.

21 MR. FERGUSON: They supplement each other. We are not
22 trying to say the same things in different words, no.

23 What I started out saying is you asked me are we planning
24 to go back. Our original intent in going to the Commission, we
25 felt that most of the utilities, except where these things were

1 open items, met the requirements of the rule. We recognized that
2 there were some things that were developed at the late stage that
3 were -- that may not have been. For instance, the question was
4 posed to us: Does Browns Ferry meet the rule?

5 We never went after Browns Ferry to see whether it met
6 Appendix A -- I should not say that. Appendix A was based on
7 Browns Ferry. We never went back to see whether Browns Ferry met
8 Appendix R.

9 We do know that over the last years we've published a
10 number of supplementary guidance documents that we mentioned. We
11 have not checked Browns Ferry to see that they agree with every
12 part of that or not. We do not know that they do not agree, be-
13 cause there were some things that perhaps were not looked at
14 during the Browns Ferry evaluation which they already have.

15 What I was trying to point out when I mentioned the
16 Commission told us that the Commission gave us comments on what
17 things they wanted to see in the rule when it was published for
18 comment, and one paragraph is this.

19 "There are, however, a few instances where the staff
20 has accepted certain fire protection alternatives that would not
21 satisfy some of the requirements of the proposed rule. The
22 minimum requirements contained in this rule were developed over
23 a three-year period, and in each of these instances the staff
24 accepted a proposed alternative before these minimum requirements
25 were established. All licensees will be expected to meet the

1 requirements of this rule in its effective form, including whatever
2 changes result from public comment."

3 Those are the Commission's words to us. I think what
4 Mr. Benaroya was presenting was a counterproposal.

5 MR. SIESS: Do you think you oversold the Commission?

6 MR. FERGUSON: Do I think we oversold the Commission?

7 MR. SIESS: So they said look, fellows, this is so good,
8 you want to make a rule out of it, then everybody has to comply
9 with it, including you, so that now you cannot accept anything
10 less. That is what they are saying in that paragraph you just
11 read.

12 MR. FERGUSON: Right.

13 MR. SIESS: Does Appendix R --

14 MR. FERGUSON: I think --

15 MR. SIESS: Does Appendix R contain all the things
16 necessary for fire protection, or does Appendix R have to be taken
17 with Appendix A to branch technical position?

18 MR. FERGUSON: The latter case. It was not intended
19 to cover everything. It was only intended to cover those things
20 we needed in order to resolve the problem at hand.

21 MR. SIESS: Now we have a set of criteria in Appendix
22 A of the branch technical position as augmented by a series of
23 rules which references the branch technical position.

24 Once you have referenced a branch technical position in
25 the rule, can you change that branch technical position without

1 going back to rulemaking?

2 MR. FERGUSON: I cannot answer that. I do not know, sir.

3 MR. SIESS: Can anybody answer that? I would think the
4 staff would be somewhat interested in knowing. Once you have
5 referenced a branch technical position in a rule --

6 MR. BENAROYA: The rule specifically is for those items --

7 MR. SIESS: Stop a minute and listen. This is a legal
8 question. If you don't have a lawyer here, you might want to ask
9 him.

10 Once you have referenced a branch technical position in
11 a rule, can that position be changed without a rulemaking?

12 MR. BENAROYA: I hope so, because as I say, we made the
13 point of not incorporating the Appendix A or the branch technical
14 position into the rule.

15 MR. SIESS: You have, though. I just read it. I just
16 borrowed a copy and read it. I was just told that you do.

17 MR. BENAROYA: The lawyers told us it is not.

18 MR. SIESS: So you have a non-legally binding branch
19 technical position supplemented by a legally binding rule to make
20 up the totality of fire protection. That is interesting. That
21 is a mishmash. It may even be a first.

22 MR. KNOTLEY: Dr. Siess, I was told that at the time
23 we were incorporating the changes the Commission asked us to put
24 in that by referencing the BTP and Appendix A in the footnote,
25 we recognized its existence, but it did not become part of the rule.

1 MR. SIESS: That bothers me just about as much.

2 (Laughter.)

3 You know, I have fire protection now divided into two
4 parts. One is the law of the land, which is what a rule is, and
5 the other is something that could be changed at the whim of the
6 staff; and I use the word somewhat facetiously because the staff
7 does not really have whims on that.

8 But as far as this committee is concerned, the staff
9 does not change a regulatory guide without asking for the ACRS
10 concurrence, but the staff changes branch technical positions at
11 will. They do not even have to inform us that they have been
12 changed. So regulations, you do not have to consult us on that,
13 but the Commission sort of suggested that we be consulted.

14 At the other extreme, the branch technical position,
15 not only do you not have to consult us, you don't even have to
16 advise us until we happen to get a copy of the branch technical
17 position the next time a list comes out.

18 This is even stranger to me, that we now have the
19 essentials of fire protection embodied in two quite different types
20 of documents, one with the full Commission endorsement and the
21 other that is simply a branch technical position. And I do not
22 know how far up in management you have to go to get approval of
23 a branch technical position. I think you have to go beyond the
24 branch, don't you?

25 Do you have to go the office director for approval of a

1 branch technical position?

2 MR. BENAROYA: You have to go to Mattson's organization
3 also.

4 MR. SIESS: To the AD level?

5 MR. BENAROYA: The director has to take it over to
6 Mattson's organization.

7 MR. BENDER: Could I ask --

8 MR. BENAROYA: Above the division director level.

9 MR. SIESS: Division director.

10 MR. BENDER: Just for a matter of getting an understand-
11 ing of how this thing will proceed, do you have in writing the
12 legal interpretation that you just gave me orally?

13 MR. KNOTLEY: No.

14 MR. SIESS: Lawyers don't put things in writing.

15 (Laughter.)

16 MR. BENDER: It seems to me that we have seen enough
17 comment from the regulated industry to make me be less than happy
18 with the response you are giving me which says you can be flexible
19 about the branch technical position because it is not a part of
20 the rule, whereas those who think they have to comply with the
21 rule do not see that kind of flexibility.

22 As a matter of fact, I think I was somewhat surprised by
23 what I thought were different viewpoints expressed by Mr. Ferguson
24 and Mr. Benaroya with respect to how you would deal with parts of
25 the fire protection branch technical position, and probably the

1 rule in the future once the rule comes into being.

2 One of you I thought said what has been agreed to we
3 will probably accept, and the other one said we are going to
4 review everything all over again.

5 MR. BENAROYA: Let me correct that if I can. What we
6 are saying is that we are going to bring that to the Commissioners
7 with our recommendation that we do not review over again the items
8 that have been approved.

9 MR. BENDER: Is that a condition of you recommending
10 the rule? Are you going to put the rule down and then write the
11 letter to them?

12 MR. BENAROYA: We hope to do that soon, and the rule
13 will not be ready until the fall.

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1 MR. BENDER: Again, I am constrained to --

2 MR. FERGUSON: I would like to comment on that
3 last thing. It would have to be done at the time the rule
4 goes forward. It would have to be resolved no later than
5 that time, because right now there are contradictory
6 statements in the rule itself on that matter.

7 There is one that says the rule does not rescind
8 anything in the SER's. There is another that says Appendix
9 A as applied by the staff, which ostensibly gives everything
10 that we have agreed to -- and then we have the other that
11 says there are some of these things where everybody is going
12 to have to meet them.

13 We will have to resolve that before we go forward.

14 MR. BENDER: Who is developing those? As I
15 understand it, you are trying to get the rule in place by
16 some time in, what, October?

17 MR. FERGUSON: It will take about that long.

18 MR. SIESS: November 1, the changes have to be
19 made.

20 MR. BENDER: Who is developing that position which
21 you said has to go forward with the rule?

22 MR. FERGUSON: Dave, Vic, myself, and Tom Womback
23 and Greg Harrison.

24 MR. BENDER: When will we have access to that? If
25 the Commissioners want to comment on the rule, I think

1 looking at the rule is important, particularly with respect
2 to operating plants. When will we have access to that
3 information?

4 MR. FERGUSON: Our present plan would be to take
5 into account all of the public comments, and the comments
6 made by yourselves, by around the 1st of August. And I
7 would say that when the totality would be done -- if you
8 want something specific on what we are proposing for this
9 problem, I do not see why we could not, you know, do it
10 piecemeal, and get that part of it, and inform the
11 committee. I don't know of any objections.

12 MR. BENDER: It does not seem to me it would be
13 wise for us -- I am just speaking for myself right now -- it
14 does not seem wise for us to comment on the rule without
15 knowing how you are going to apply it. It seems clear there
16 will be a number of exceptions to the rule.

17 MR. FERGUSON: One possibility is to comment that
18 here is a problem that should be resolved before it goes
19 final.

20 MR. BENDER: I think that is --

21 MR. FERGUSON: You have the --

22 MR. BENDER: Don't publish the rule until you see
23 how it is going to be used. I think that is probably what
24 my interpretation of the commentary from the industry has
25 been. And they are not so much concerned about things that

1 you have told us you are arguing about, whether there is a
2 five-man brigade or a four or a three, because most of them
3 already have five available, allowing them to use a couple
4 of cards as part of the rule, but if other things are going
5 to come up that are going to reopen the whole fire
6 protection question in every operating plant, then I can see
7 their concern.

8 Frankly, I think the Commissioners need to know in
9 some detail how much that issue is. It seems to be pretty
10 big in some people's eyes.

11 MR. SIESS: Since the Commission made some
12 changes, was the 1 November 1980 implementation date the
13 original staff recommendation?

14 MR. FERGUSON: That was an original date, but with
15 the out of "or for good cause shown at the first refueling
16 outage thereafter."

17 MR. SIESS: Is that still in the rule?

18 MR. FERGUSON: No.

19 MR. SIESS: The Commission decided that whatever
20 needed to be done could be done safely in three months or
21 four months?

22 MR. FERGUSON: Apparently.

23 MR. SIESS: Clearly a non-technical decision.

24 Was the 30-day comment period a staff proposal?

25 MR. FERGUSON: Yes, sir.

1 MR. SIESS: You honestly felt that this had been
2 thoroughly debated and aired, and you would not get the kind
3 of comment that you are getting now -- I mean, are you
4 surprised that there has been so much desire for public
5 comment in this 30-day period?

6 MR. FERGUSON: No, sir. We expected comments, and
7 we hoped that we would get the comments, that we could
8 resolve problems with the rule, and put the problem to bed,
9 and get this whole thing over with. I think when we saw the
10 dates, too, we expected those kind of comments.

11 Obviously, they negated agreements that staff had
12 with particular licensees that are licensee conditions. For
13 instance, the dedicated shutdown conditions for SEP plants,
14 all the SER's say they will be deferred until the SEP
15 program is completed, and we know roughly it takes 30 to 36
16 months to create a dedicated system.

17 MR. SIESS: The rule says --

18 MR. FERGUSON: I think it is October, 1982.

19 MR. SIESS: That is still not 36 months.

20 MR. FERGUSON: No, sir.

21 MR. BENDER: Getting back to the basic thing you
22 were going to do for us, which was to make -- tell us what
23 about the rule might be different from branch technical
24 positios -- Position 9.5-1. Are there other things?

25 MR. FERGUSON: I covered them all in general. The

1 next thing would be more specific about what kind of
2 specific item is in each one.

3 MR. BENDER: All right. You have been pretty
4 general. I guess the introduction of the point that there
5 are inferences in the branch technical position, that there
6 are comments that will become specific in the rule might be
7 an important amplification. Is everything added in the rule
8 an amplification of an implication?

9 (General laughter.)

10 MR. FERGUSON: I believe so, yes.

11 MR. BENDER: We will hear from the industry people
12 later.

13 MR. FERGUSON: I could just run through a few of
14 these.

15 MR. BENDER: Why don't you give us a few examples?

16 MR. SIESS: Before you start, let me know what
17 question you are answering.

18 It was my understanding that the 17 items in
19 Appendix R were not necessarily new items, but were those
20 items from the previous positions that you had not been able
21 to get agreement on.

22 MR. FERGUSON: Yes, sir.

23 MR. SIESS: That is right.

24 MR. FERGUSON: Yes.

25 MR. SIESS: So those would either be repetition or

1 paraphrasing of something that is already in Appendix A, but
2 now putting it in the rule.

3 MR. FERGUSON: Right, or there may be some
4 specific aspect of it. For instance, Appendix A would
5 require a fire brigade. The specific requirement is five
6 people. It would be getting agreement on the number of
7 people, not the fire brigade.

8 MR. SIESS: I have not done my homework because I
9 have been working on something else, but is it perfectly
10 clear to anybody that if he looks at a particular time in
11 Appendix R, that he knows what item in Appendix A that item
12 relates to, and therefore the item in Appendix A is no
13 longer in force, it has been replaced by the one in Appendix
14 R?

15 MR. FERGUSON: No.

16 MR. SIESS: He cannot tell that by looking at it?

17 MR. FERGUSON: No.

18 MR. SIESS: Are there instances where the item in
19 Appendix R is different from and therefore supersedes the
20 item in Appendix A -- an item in Appendix A? Can I satisfy
21 both simultaneously, is what I am trying to say, I guess.

22 MR. FERGUSON: Yes.

23 MR. SIESS: I can satisfy both simultaneously.
24 There would be no conflict?

25 MR. FERGUSON: Yes.

1 MR. SIESS: Okay.

2 MR. BENDER: Now, could I ask, if you would, let's
3 see if you can identify something besides the fire brigade
4 that represents amplification of an implication?

5 MR. FERGUSON: In Item D on manual fire
6 suppression, we have included in the rule a requirement for
7 hose stations within the containment, whereas Appendix A
8 implies that through requiring a hose being able to reach
9 every point. It says things inside the containment would be
10 subject to an individual fire hazards analysis. The hose
11 test, for instance, where we specify the pressure and the
12 frequency for hose tests. That is in Appendix A.

13 MR. BENDER: How many -- of the operating plants
14 which have been licensed and which were alleged to comply
15 with the branch technical position, how many of them are
16 likely to have met the requirements of D and E?

17 MR. FERGUSON: I would say on E I do not recall
18 more than two or three people on hose stations within the
19 containment. I do not really know, but I would put it at
20 somewhere between 5 and 10.

21 MR. BENDER: Why would they have objected to those
22 things? They do not seem that difficult to do to me, but
23 that is because I am not --

24 MR. FERGUSON: I am not sure of the hose test.
25 That seems to be pretty simple in my mind. I really do not

1 know what the problem is. The hose stations within the
2 containment, it would be a utility which did not have it
3 there. We would like to have hoses outside containment, so
4 we don't have any penetrations.

5 Other utilities have put the hose stations in the
6 station as part of the original design. In other cases,
7 they have tapped off other service water systems to provide
8 the fire system, although it is not on the --

9 MR. BENDER: Where we have inerted containments,
10 is there any relaxation of this requirement?

11 MR. FERGUSON: I believe most of the inerted
12 containments are BWR's.

13 MR. SIESS: All of them?

14 MR. FERGUSON: And I do not think they have the
15 same requirements.

16 MR. BENDER: During the time when they are open
17 for refueling, does that change the rules?

18 MR. FERGUSON: When they are open for refueling?
19 It does not change the rule any then.

20 MR. BENDER: They are de-inerted, then.

21 MR. FERGUSON: They are supposed to have special
22 procedures if they do things that radically change the fire
23 potential and that sort of thing to make special
24 arrangements at that particular time, depending on what is
25 going on at that particular time.

1 MR. SIESS: De-inerting radically changes fire
2 protection.

3 MR. FERGUSON: That is true. The problem even
4 with inerted -- somewhere, if you have an accident, that
5 would produce a fire in an oxygen atmosphere, usually it
6 requires you to shut down, and eventually you are going to
7 have to de-inert before you do something. If the condition
8 still exists for that -- if you have oil leaking on hot
9 pipes, when you de-inert, you would have to fire at that
10 time.

11 MR. BENDER: If I look in the branch technical
12 position, will I find guidance on the subject?

13 MR. FERGUSON: Yes.

14 MR. BENDER: What conditions would be imposed on
15 de-inerting?

16 MR. FERGUSON: No specific requirements.

17 MR. RAY: Excuse me. It seems I read somewhere in
18 your provisions that under any unusual activities, special
19 provisions for fire protection had to be made.

20 MR. FERGUSON: That's right. General terms. No
21 specific guidance of what special provisions you should make.

22 MR. BENDER: I think I am sort of exploring
23 something which derives from the idea of interpreting an
24 implication. There is an implication here that if you
25 de-inert, you ought to do something, and since you are

1 busily interpreting implications in the rule, I think there
2 was an implication here.

3 I would like to know why that is not in the rule.

4 MR. FERGUSON: Are you saying when you de-inert --
5 you have a plant that has been inerted for five years. Now
6 you de-inert --

7 MR. BENDER: What is required in the way of fire
8 protection for that circumstance?

9 MR. FERGUSON: That is not in the rule. That is a
10 case that is outstanding between us and the licensee.

11 MR. BENDER: I understand what you are saying.
12 You are saying, if I have a fight with a licensee, I will
13 make a rule. If I do not have a fight with a licensee, I
14 will ignore it.

15 MR. FERGUSON: No. No. The question comes to be,
16 first of all, when we have a fight with a licensee on a new
17 issue the first step is to get a rational technical argument
18 down for both sides, and most things are resolved by that.
19 That has been done for 99 percent of it.

20 MR. BENDER: Are you arguing about sectional
21 control with many applicants today?

22 MR. FERGUSON: I would put that at less than 5
23 also. I would put all of these at less than 5. There is
24 only 100 -- maybe there were two or three people.

25 MR. BENAROYA: A year ago, we had many operating

1 reactors. The lawyers told us that it would be voluminous
2 work for them. The orders that --

3 MR. BENDER: That is true.

4 MR. BENAROYA: We were considering the rule and
5 orders -- we went to the rulemaking because of conditions
6 that were beyond our control in trying to implement these
7 thigs. I thought that that --

8 MR. FERGUSON: Basically, the argument is, the
9 fire protection requirement you are doing is not the same
10 safety significance, I guess you would say, of other
11 things. They are things where you are really establishing
12 policy. We are not saying Plant X is unsafe because they do
13 not have a five-man fire brigade. They only have a
14 three-man fire brigade.

15 What we are saying is, the NRC would like to adopt
16 a policy that all stations would have a five-man fire
17 brigade.

18 MR. SIESS: It is not important enough for an
19 order, so make a rule.

20 MR. FERGUSON: I think it is the other way
21 around. The same importance is there whether it is a rule
22 or an order. However, it is not so plant specific that a
23 particular plant is unsafe strictly because of this. We are
24 saying they just do not meet the policies that the NRC is
25 trying to establish.

1 MR. SIESS: Are you sure you are not a lawyer?

2 (General laughter.)

3 MR. EBERSOLE: I have a lot of trouble determining
4 whether it is all that important as to whether it is three
5 or five or six or eight, in respect to the critical nature
6 of how well they are trained in exercising critical
7 discretion in putting out fires.

8 I think the lesson to be learned from Brown's
9 Ferry was, there was fear as the operators stood and looked
10 at the fire along two lines. One was if the fire persists,
11 has there or has there not been adequate separative aspects
12 built into the design? That is one.

13 Second is, if I aim the hose up there, will I in
14 fact get those circuits which have not yet been damaged
15 because I am going to wet them down?

16 All this led to the fact that it was then realized
17 that operators were ignorant of where circuits and critical
18 operating functions existed in the plant in particular as
19 they were distributed throughout the circuitry and cable
20 trays and so forth. They simply did not know where the
21 Division A, Division B, et cetera, were.

22 It is a little depressing to me to find out
23 Sequoyah comes along and there is now no requirement either
24 that they know about the distribution patterns --

25 MR. SIESS: They know how to hold a hose.

1 MR. EBERSOLE: But they don't know where to point
2 it. This is a particular problem here that we address the
3 matter of discretionary actions on the part of fire
4 protection people, whether there be three or five or ten
5 people. I have the disturbing notion that fire protection
6 people are going to go in wholesale, and if the thing has
7 not burned out, that performs the shutdown functions, and
8 they will wet it down so it won't work anyway.

9 I understand that the automotive fire protection
10 systems have been designed along discretionary lines, so
11 cable tray or Division A will be discretely sprinkled or
12 treated, and B will be treated, and the range of the
13 sprinkler systems is limited.

14 On the other hand, when people run in excited, a
15 fire brigade, and start putting the fire out, they may be
16 anxious to put out the possibility the fire will spread to a
17 redundant system which does not have physical separation
18 because it is not required by Reg. Guide 175, and they will
19 proceed to wet down the whole region, with the end result
20 that they are going to disable equipment by a moisture fix
21 rather than by fire.

22 I don't see that this has really been fixed up
23 here.

24 MR. FERGUSON: We were trying to get that in
25 having fire protection strategies and plans thought out

1 ahead of time, and the fire brigade trained in that, and most
2 of the utilities are doing that sort of thing.

3 MR. EBERSOLE: Isn't a necessary basis for that,
4 Job, that you require that operators know where critical
5 shutdown circuitry and equipment is physically located so
6 that they can be discretionary?

7 MR. FERGUSON: Right, and we feel they should be
8 part of a plan, every area of the room, what should be kept
9 cool, what can cause additional problems.

10 MR. EBERSOLE: Why do I hear then that the
11 Sequoyah operators don't know what the distribution patterns
12 are?

13 MR. FERGUSON: Well, I really cannot answer that.

14 MR. SIESS: At what level of knowledge would you
15 expect -- an SRO should know that, right?

16 MR. FERGUSON: Not by virtue of being an SRO. I
17 think it has to be done by -- under the people who are
18 setting up the program, to look at each one of these areas
19 and decide what are the problems in each area, and get them
20 down --

21 MR. SIESS: An SRO does not know where Train A and
22 Train B is, and what switches are in that cabinet, and what
23 breakers are over here?

24 MR. FERGUSON: I cannot answer that question.

25 MR. SIESS: Can anybody answer it? I thought that

1 is what a senior reactor operator knew.

2 MR. WOMBACH: I am Tom Wombach from NRR. I am
3 sure the senior operators know where the equipment is for
4 the various trains. They do not know the cable routing,
5 which is some of the aspects that Bob was talking about.

6 MR. SIESS: Who would?

7 MR. WOMBACH: This is what he is explaining, that
8 we want it in the pre-fire plans. What is in a particular
9 fire area --

10 MR. SIESS: I do not like the plans. You have to
11 think everything out in advance. I would much rather have
12 somebody who knows his business go in there, so if it
13 happens to occur over in this corner that nobody thought
14 there would ever be, or there were two fires at one time,
15 there would be a knowledgeable person.

16 MR. WOMBACH: We would hope that the fire brigade
17 leader would have studied the pre-fire plans that have been
18 prepared by the engineering staff that tell him what is
19 critical in each of the critical fire areas. He does not
20 carry this along with him. He uses them in the training
21 program to be able to identify which areas he would have
22 problems with, redundant shutdown equipment.

23 MR. BENDER: If the SRO does not necessarily
24 know --

25 MR. WOMBACH: The SRO --

1 MR. BENDER: -- would the security guard be
2 expected to understand them?

3 MR. WOMBACH: The SRO who is the fire brigade
4 leader would be expected to know them, and the security
5 people on the fire brigade are under his direction. He
6 would be telling them where to go and what to do.

7 MR. BENDER: Is that an implication that was
8 amplified?

9 MR. WOMBACH: It is spelled out specifically in
10 the rule. And industry comments come down upon us for that.

11 MR. BENDER: It comes under the heading of
12 implication being amplified.

13 MR. FERGUSON: I think it is much more specific
14 than that in the guidance.

15 MR. BENDER: You understand what I am saying.
16 Evidently, this was always in the branch technical
17 position. People just did not understand it. So now you
18 spell it out in the rule. And now they do understand it,
19 and they object. That is what I understand to be the point.

20 MR. FERGUSON: I think that interpretation could
21 be -- or it could be well that we saw you say it there, but
22 we have flexibility. Now you are saying it is part of the
23 rule, so it takes a whole new -- you mean, you really are
24 going to make us do it. Then, that is a problem.

25 MR. BENDER: Let me ask about the fire barrier

1 question. That has been around for a long, long time. How
2 many people object to the requirement right now?

3 MR. FERGUSON: I do not really know. Most of the
4 -- There are two objections to the thing. One is, there may
5 be some licensee which really has not qualified the seals
6 which he has in the plant. I am not sure whether there is
7 anybody like that or not. The other major objection is the
8 differential pressure requirement that we had put in there,
9 because most seals are tested with a negative pressure.

10 In other words, the coal site is hot. We put the
11 differential pressure on there mainly to eliminate those
12 kinds of seals, which may be made up of different
13 combustible materials. You would have maybe something fire
14 resistant on the outside, something combustible on the
15 inside. If the outside shell broke or something, then you
16 would get a whole different performance.

17 Most of the seals that we see being installed
18 today do not have those kinds of limitations, and it is
19 questionable about whether that particular requirement needs
20 to be maintained.

21 MR. BENDER: Are there a number of operating
22 plants which have not been evaluated with respect to these
23 penetration seals?

24 MR. FERGUSON: No. I would say all of them, the
25 question has been raised, and I would say at the time we

1 started on the rule, they were somewhere -- we did not have
2 the qualification data in house yet. Some places, some
3 utilities did not have it at that time.

4 They committed to make tests. It was a matter of
5 waiting the six month for them to send the test results in.
6 I would say the majority of them have submitted test data.
7 One or two have been tested with the pressure differential.
8 Others have referenced those tests. Some of them have not
9 tested that aspect of it, and we are looking for ways of
10 justifying those seals based on the design of seals
11 themselves.

12 I think we leave it out in the rule from the
13 standpoint of either test with this or justify that the
14 differential pressure does not make it.

15 MR. BENDER: It is not our general practice to
16 invite the audience to comment, but inasmuch as this is an
17 information gathering session, anybody in the audience who
18 wants to comment on this or any of these points, we would be
19 happy to hear commentary, if it can be brief.

20 There was somebody that had his hand up back
21 there. Would you identify yourself, please?

22 VOICE: When Boston Edison met with the NRC on
23 penetration seals way back two years ago, we were never
24 pressured into doing any pressure differential. We were
25 asked to qualify the penetration seals, and we did test the

1 penetration seals for a duration of six months, sent the
2 reports back in, and after six months, they came back and
3 told us that we should test them for the pressure
4 differential, and at no time in the past were we ever told
5 to do the test for the pressure differential. They just
6 asked us to go back and qualify, and the amount of time and
7 engineering we took to do the test, and also the Appendix R
8 specifically says that the maximum differential of pressure
9 that your seal will experience -- we don't even know what it
10 is, and we did go back to the NRC after we came to know and
11 we were told that they do not have a feel for what type of
12 pressure differential they wanted to use, and that is about
13 it. Thank you.

14 MR. BENDER: Thank you.

15 I am not proposing to ask you to comment on the
16 validity of the complaint, but I think I would have to say
17 that this is one of the questions I think has been evolving
18 over a period of several years. I am not at all clear that
19 you have set the same requirement on everybody at the same
20 point in time. What are you going to do about that?

21 MR. FERGUSON: This particular one is one where we
22 adopted a staff position early on, two years ago, and the
23 usual case was that staff position would be sent to the
24 licensees, which had that differential pressure requirement
25 in it, and in some cases the responses came back that they

1 were tested with it.

2 In some cases, they explicitly said that they were
3 not tested with it, but they do not think it causes a
4 problem. In some cases, the responses were silent on it.
5 Usually when we went back, we should be going back with
6 saying -- to address the point, either to justify that the
7 seal can take the differential pressure or --

8 MR. BENDER: Could I be legalistic for a minute
9 now and say, if I were contesting this license and wanted to
10 challenge the validity of the license, once this rule has
11 been stated and the time limits set, could I challenge it on
12 the basis of this test not being done?

13 MR. FERGUSON: Not on the test not being done, if
14 there were some justification for why pressure differential
15 did not make any difference to the particular seal design.

16 MR. BENDER: If they did not know they had to make
17 it, and it took X months to do it, would you require them to
18 shut it down until the test was made?

19 MR. FERGUSON: I cannot answer that, not from the
20 point of NRC. You are asking me under what conditions would
21 the NRC shut down a plant, and I am not qualified to answer
22 that question.

23 MR. BENDER: We are trying to understand how the
24 rule is going to be used.

25 MR. FERGUSON: I understand that. You are talking

1 to me. I do not shut down plants.

2 MR. SIESS: Are you from the Office of Standards
3 Development?

4 MR. FERGUSON: No, sir.

5 MR. SIESS: Only I&E can shut down plants. Is
6 that right?

7 (General laughter.)

8 MR. FERGUSON: I believe NRR can shut down
9 plants. I am not knowledgeable in what the NRR criteria is
10 and how this fits into it, whether a plant would or would
11 not be shut down. I would be happy to answer it on a
12 personal basis.

13 MR. STEARNE: My name is Mike Stearne, Wisconsin
14 Public Service Corporation.

15 We are dealing with a proposal of a new rule, and
16 in the case of our plant, we have an agreement -- we have
17 full sign-off on everything for fire protection, but when
18 that rule is instituted, the first inspector that walks out
19 and sees that we do not comply with a specific aspect of the
20 rule is duly bound to try to enforce the rule, and we have
21 no choice but to try to comply with the new rule, unless we
22 get an exemption.

23 I do not see anything in the rule that grants
24 exemptions on the basis of previous analysis. It is not
25 provided. And I&E has no choice. That is a simple fact of

1 the matter. It is a simple legal point.

2 MR. BENDER: Thank you.

3 MR. RAY: I am confused in one area. Several
4 times this afternoon the statement was made that this rule
5 will apply to plants in operation. Is that the restriction?

6 MR. FERGUSON: Prior to January 1, 1979.

7 MR. RAY: What applies to plants in the future?
8 How does the industry know what to provide in a new plant?

9 MR. FERGUSON: Appendix A and the branch technical
10 position are the only two documents.

11 MR. SIESS: Appendix A was for operating plants,
12 was it not?

13 MR. FERGUSON: For those plants where it was
14 docketed after July 1st of 1976, I believe.

15 MR. SIESS: It was also for construction permits.

16 MR. BENAROYA: It is for the new plants.

17 MR. SIESS: Now, I would like to go back to that
18 question about revising the BTB. You made a rule to clarify
19 Appendix A amplification of implications.

20 MR. BENAROYA: I hate to put it down exactly that
21 way, Dr. Siess.

22 MR. SIESS: Try it approximately that way.

23 MR. BENAROYA: It does -- Let me explain that.
24 What we are trying to do is for specific plants where we
25 have had a disagreement with the licensee as to how to

1 implement that item. In another plant, the same level of
2 safety can be achieved by different methods, but we figured
3 for that particular plant, looking at the reviews, we have
4 done what we have in Appendix R is the most appropriate and
5 acceptable method.

6 Appendix R is very specific.

7 MR. SIESS: It goes with the branch technical
8 position itself.

9 MR. BENAROYA: There is very little difference
10 between the two, and it is really splitting hairs trying to
11 see how they differ.

12 MR. SIESS: I am talking about a new plant, and I
13 want to design it to satisfy the staff on fire protection.
14 What do I look at? Branch technical position 9.5-1 plus
15 Appendix A plus Appendix R? Or do I just stop with the
16 branch technical position plus Appendix R, or where? I have
17 three documents.

18 MR. BENAROYA: Let me explain that. The branch
19 technical position is for new plants. Appendix A takes the
20 position, gives you some more options, trying to be more
21 flexible for plants that have already been built. I can't
22 very well change the layout. So it gives you more options.
23 So, now what do you do? That is what Appendix A covers.
24 For new plants, you have to use cables that have passed the
25 test.

1 Reg. Guide 1.120 is really the revision of the
2 branch technical position, making it clear, and taking into
3 consideration the comments we received from the industry.

4 MR. SIESS: Which Reg. Guide 1.120?

5 MR. BENAROYA: The one on the --

6 MR. SIESS: The one we have not seen yet, not the
7 one we did not like?

8 MR. BENAROYA: That is right, because we did not
9 have a dedicated shutdown system.

10 MR. SIESS: That is not why we didn't like it.
11 You are still working on 1.120.

12 MR. BENAROYA: No. Yes.

13 (General laughter.)

14 MR. SIESS: I thought it was dead. Give me the
15 simple answer to my simple question. I am designing a new
16 plant, not building it, designing it. What do I look at?

17 MR. BENAROYA: Special position 9.5-1.

18 MR. SIESS: That is all? And it is perfectly
19 clear?

20 MR. BENAROYA: Hopefully, like any other guide,
21 Dr. Siess.

22 MR. SIESS: Do you know what it means?

23 MR. BENAROYA: We know what it means.

24 MR. SIESS: Okay.

25 MR. BENDER: Do we want to continue any further

1 with Mr. Ferguson? I think we have had a chance to hear
2 pretty much what the staff's viewpoint is.

3 My own view still is that the branch technical
4 position has a lot of vaguery in it. It has been
5 interpreted in such a way now so that most plants are
6 thought to comply with it because the staff has reached some
7 kind of agreement with them. I am still uncertain what the
8 new ruling might do to those understandings. And without
9 meaning to put words in the committee's mouth, I suspect I
10 would have to pose that question to the Commission as being
11 a consideration which they should take into account before
12 adopting any rule.

13 Would that be a wrong assumption?

14 MR. FERGUSON: I think that is a fair comment.

15 MR. BENAROYA: I would go a bit further and try to
16 say, I would like to hear or would like to see your
17 recommendations, because we have, as I expressed them, what
18 our recommendations should be to the Commissioners. I am
19 sure your views will weigh in also.

20 MR. BENDER: We hope so. Otherwise, we don't want
21 to comment.

22 MR. SIESS: If you had not had any access to
23 lawyers for any purpose, would you have chosen to go the
24 rulemaking route to resolve this?

25 MR. BENAROYA: You are putting me in an awkward

1 situation, because I am on record to objecting strenuously
2 to that rule.

3 MR. SIESS: Okay, I will accept your personal
4 objection.

5 (General laughter.)

6 MR. RAY: I would like to compliment Chairman
7 Bender's last comment by observing that if branch technical
8 position as applied in the past has so confused the industry
9 that it has been necessary to write an Appendix A and an
10 Appendix R and now a set of rules so you can understand --
11 you can expect the BTP to be understood for the design of
12 future plants.

13 MR. BENAROYA: I think there is confusion here.
14 Appendix A is not a clarification of BTP. Appendix A gives
15 additional alternatives for plants that have already been
16 built around the construction. It is the same BTP. If you
17 look at the columns, it is the same column. It says, the
18 construction -- you can take the following alternatives.
19 So, it is not a notification or a change.

20 MR. RAY: The plants were in existence prior
21 possibly or under construction prior to the BTP.

22 MR. BENAROYA: Yes.

23 MR. RAY: That is where Appendix A is useful.

24 MR. BENAROYA: Appendix A is only good for a
25 limited period of time. It is going to expire pretty soon.

1 We will not have any plants left to review under Appendix
2 A. That will be the end of Appendix A, hopefully.

3 MR. RAY: Thank you.

4 MR. BENDER: Maybe it would be a good idea to take
5 a ten-minute break. We can come back and hear the industry
6 comments.

7 (Whereupon, a brief recess was taken.)

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1 MR. BENDER: I think we will now reconvene.

2 I think it is time to hear from the those who
3 wanted to make public statements. I believe the first
4 person was Mr. John Roncaioli of Northeast Utilities. Is he
5 here?

6 Did I pronounce your name right.

7 MR. RONCAIOLI: That is close enough.

8 MR. BENDER: Thank you.

9 PRESENTATION OF JOHN RONCAIOLI, NORTHEAST UTILITIES
10 KMC REPRESENTATIVE

11 MR. RONCAIOLI: My name is John Roncaioli and I
12 am with Northeast Utilities Service Company.

13 My presentation starts with good afternoon and I
14 was a little worried that I might have to change that to
15 good evening. It looks like we did all right.

16 I have been designated to present the views and
17 opinions of an owners utility group with respect to the
18 proposed rule on fire protection, Appendix R to 10 CFR 50.
19 I would like to distribute a copy of the attachments and
20 references which will be used during the course of this
21 presentation.

22 I would also like to suggest if possible, and
23 again I say if possible, if we can hold all questions until
24 following the presentation and maybe following even the EEI
25 presentation. So therefore we can address all the questions
at that time and take care of all of the concerns.

MR. BENDER: We will operate on the ground rule

1 that we will ask questions for clarification but for no
2 other reason.

3 (First slide.)

4 MR. RONCAIOLI: This owners utility group was
5 organized through KMC and represents 13 utilities as noted
6 on your attachment A.

7 Our presentation today will summarize the group's
8 joint review of Appendix R and will document the major
9 concerns and problems with the proposed rule.

10 (Next slide.)

11 I would like to begin by presenting a short
12 chronological history of the development of fire protection
13 for nuclear power plants. Attachment B will provide a guide
14 for this history.

15 Some of the dates listed are specific to
16 Northeast Utilities, but for discussion purposes the
17 sequence or time frame is representative for the industry as
18 a whole.

19 March 1975, the Browns Ferry fire.

20 May and August of 1976, NRC issued guidelines on
21 fire protection for nuclear power plants (Branch Technical
22 Position 9.5-1 and its Appendix A).

23 (Next slide.)

24 The Branch Technical Position states, Attachment
25 C, "The purpose of this document is to describe the

1 guidelines acceptable for implementing General Design
2 Criteria 3 of Appendix A to 40 CFR 50."

3 Your attention is called to the footnote.
4 "Designs or methods different from the guidelines set out in
5 this document may be acceptable if they provide fire
6 protection comparable to that recommended in the guidelines."

7 Appendix A to the Branch Technical Position
8 reinforces this by stating, Attachment D, "This Appendix A
9 provides guidance on the preferred and, where applicable,
10 acceptable alternatives to fire protection design."

11 Please note both documents provide flexibility by
12 allowing acceptable alternatives.

13 February 1977, Northeast Utilities issued fire
14 hazard analysis reports on each unit. The fire hazard
15 analysis reports represent an extensive effort by the
16 utility to review all of NRC's requirements of the Branch
17 Technical position and proposed modifications for compliance.

18 February and June of 1978, NRC performed site
19 fire protection inspections. These site inspections involve
20 physical inspections by a team of NRC personnel and their
21 fire protection consultants. Professional judgment was used
22 during the site inspections to evaluate hazards and
23 requirements on a case-by-case basis so that the best
24 possible protection could be recommended.

25 The staff generated literally hundreds of

1 additional recommendations. Resolving these positions
2 involved extensive communications, meetings, reinspections
3 and negotiations to agree on specific philosophies and in
4 some cases exact design parameters to satisfy the intent of
5 the requirement.

6 September and October of 1978, NRC issued the
7 safety evaluation reports, the SER's for each unit. The
8 Safety Evaluation reports document the exact modifications
9 that were agreed upon to satisfy all the hazards or concerns
10 based on plant specific or unique situations.

11 Please allow me to emphasize or highlight this
12 point. The significance of the SER's must be realized
13 because they document in the staff's own words the final
14 agreed upon modification based on plant specific or unique
15 situations.

16 May 29th, 1980, Appendix R was issued for comment
17 with the threat of becoming law. On May 29th, 1980, the
18 proposed rule was officially issued for a 30-day comment
19 cycle. Allow me to regress for just a second. Attachment E.

20 MR. BENDER: One clarification if I could. You
21 said with the threat of becoming law. It may be the promise
22 of becoming law, but never mind which word it is. When it
23 was issued as a proposed rule-making it is not clear to me
24 just what you are saying when you are making a point that it
25 may become law. What is the point you are trying to make to

1 it?

2 MR. RONCAIOLI: This is documenting just a
3 chronological history on how we got to where we are today.
4 That was the last of the dates in that history.

5 MR. BENDER: All right.

6 MR. RONCAIOLI: Maybe I shouldn't have said a
7 threat of becoming law. I probably should have said a
8 potential of becoming law.

9 MR. BENDER: Never mind. Go ahead. I thought
10 you were making a point.

11 MR. RONCAIOLI: No.

12 MR. BENDER: Probably not.

13 (Next slide.)

14 MR. RONCAIOLI: Appendix R was initiated by a
15 request from the Office of Nuclear Reactor Regulations on
16 October 9th, 1979. Working paper "B" was discussed with
17 this subcommittee on December 5th, 1979. The proposed rule
18 was sent to the Commission on February 13th, 1980, and
19 finally issued on May 29th, 1980.

20 Please note it took the NRC seven months just to
21 release Appendix R, but the public comment cycle was limited
22 to only 30 days. The Commission limited the comment period
23 to 30 days because we was led to believe that: (1)
24 Sufficient opportunity for public comments had not been
25 provided; and (2) that all the issues were well known. It

1 simply is not the case on both counts.

2 The first position fails to recognize a
3 distinction between industry commenting on guidance
4 documents such as Branch Technical Positions and regulatory
5 guides and the public commenting on proposed Commission
6 regulations. A guide offers guidance in meeting
7 requirements and allows flexibility for alternative measures
8 but a rule is absolutely rigid and must be met to the letter
9 of the law. No flexibility to optimize fire protection is
10 allowed because a law does not discriminate. We believe
11 that there is a definite difference in the type and amount
12 of comments provided for either situation.

13 With respect to the belief that the issues are
14 well known please note the statement of consideration of the
15 proposed rule indicates new requirements had evolved during
16 the course of fire protection reviews. New requirements,
17 all me to support that by offering one example, Attachment F.

18 . (Next slide.)

19 Attachment F is a copy of a requirement listed in
20 the Safety Evaluation Report of Connecticut Yankee Haddam
21 Neck plant. The requirement states: "An oil collection
22 system will be provided for each reactor coolant pump or a
23 fire retardant synthetic oil will be used." This
24 requirement was documented in the SER in October 1978.

25 (Next slide.)

1 Attachment G is a letter from the staff dated
2 February 1980. The staff summarized what they considered
3 open items in this attachment. Your attention is directed
4 to the asterisks. It states: "The licensee has not been
5 notified of this position previously."

6 (Next slide.)

7 Attachment H, upper section, shows what the staff
8 referred to as the new position. The lube oil system
9 components whose failures could result in leakage should be
10 designed to withstand SSE or the oil collection system
11 should be designed to withstand SSE or the oil collection
12 system should be designed to withstand SSE.

13 The lower section of this Attachment H documents
14 the requirement as presented in Appendix R. Please note the
15 requirements are identical. This clearly demonstrates in
16 the staff's own words that there are definitely new
17 requirements in the proposed rule.

18 (Next slide.)

19 Now that we have pretty much covered the history
20 and development of fire protection in Appendix R I would
21 like to discuss the intent, the purpose of Appendix R.

22 From your subcommittee meeting of December 5th,
23 1979, I offer the following quotes, Attachment I.

24 Page 7, Mr. Ferguson from the staff stated:
25 "There are about 530 open items on the SERs that we have

1 issued. Some of these come about because of some of the
2 analysis we originally requested in September of '76 that
3 wasn't done at the time we issued an SERs. Other come about
4 because we feel some changes should be made and the utility
5 has not agreed with us and wanted more time to evaluate it.
6 Other changes and other open items are simply getting
7 documentation, things like qualification tests for seals and
8 presenting the information, that sort of thing."

9 In this quotation the staff has indicated that
10 not all 530 items were necessarily disagreements. Since
11 some safety evaluation reports are on the order of two years
12 old and not all 530 issues are differences of opinion it
13 appears likely that many of these issues have been resolved
14 at this late date.

15 The staff should advise this subcommittee and the
16 Commission as to the exact number of differences of opinion
17 which presently or actually exist. Mr. Ferguson has done
18 this during his presentation earlier. Since this number of
19 530 was used during the thinking in the development stage of
20 Appendix R I think the record should be set straight.

21 (Next slide.)

22 With respect to the intent of the rule allow me
23 to present the following information. In the statement of
24 consideration of the proposed rule, Attachment J, it
25 states: "17 generic issues exist in the fire protection

1 safety analysis reports for 32 plants where agreement has not
2 been reached between the staff and some licensees."

3 (Next slide.)

4 Again in your subcommittee meeting of December
5 5th, 1979, Attachment J, on page 9 Mr. Ferguson stated: "In
6 summary, I guess, the base line is to resolve these
7 differences."

8 (Next slide.)

9 On page 16 Mr. Bender stated: "If I understand
10 correctly, almost all of it has already been implemented in
11 the plants to which the rules apply. So what is the rule
12 accomplishing?"

13 Mr. Notley: "For those plants where we do have
14 the difference of opinion."

15 From this documentation it certainly appears that
16 the base line was to resolve the differences of opinion in
17 the safety evaluation reports. If Appendix B is truly the
18 vehicle to close out differences of opinion as the staff has
19 led everyone to believe, then why are all licensees expected
20 to meet its requirements regardless of the status of their
21 safety evaluation reports?

22 With respect to the rule itself we believe that
23 if a rule is issued it should only set the requirements and
24 should not endorse or support specific concepts or designs
25 by presenting an infinite amount of detail. Licensees

1 should have the responsibility for proposing acceptable
2 designs or programs to fulfill the specific requirement.

3 In the conference report to the Energy
4 Reorganization Act of 1974 the Congressional view was
5 expressed that the NRC should avoid generating design data
6 of its own or from developing design. It appears that the
7 staff has developed a trend toward less flexibility and a
8 tendency to insisting on prescriptive solutions. Although
9 earlier NRC reviews resulted in an acceptance of alternative
10 methods and designs in accordance with Appendix A of the
11 Branch Technical Position Appendix R as now proposed would
12 require licensees to meet one specific method preferred by
13 the staff.

14 As an example of this, approximately seven pages
15 of the rule are devoted to detailed requirements concerning
16 fire brigades and another five to establishing appropriate
17 administrative controls.

18 We strongly urge the subcommittee to review in
19 particular the 17 specific requirements of section 3 with
20 this viewpoint in mind.

21 Another area of concern is due to the ambiguity
22 of the rule of the proposed rule with respect to critical
23 technical requirements the opportunity to provide
24 constructive comments has been precluded. Until such
25 language is clarified licensees will remain unable to

1 effectively present their views, let alone intelligently
2 implement the requirements.

3 Another matter of concern is the requirement to
4 consider fire simultaneously with other accidents. Previous
5 guidance was clear that fires need not be postulated to be
6 concurrent with non-fire related failures in other systems,
7 other plant accidents with the most severe natural phenomena.

8 In the proposed rule the requirements for fire
9 protection extend beyond that necessary for safe shutdown
10 and related to systems important to safety which would mean
11 most every area of the plant.

12 With respect to the cost benefit of the proposed
13 rule we believe that licensees have already spent generously
14 in terms of manpower and money to upgrade fire protection to
15 an acceptable level thus assuring the health and safety of
16 the public. The infinite incremental benefit which Appendix
17 R appears to offer cannot be justified by a realistic
18 cost-benefit appraisal. In fact, some utilities have already
19 provided tentative estimates to implement the proposed rule
20 as written. These estimates range up to \$50 million per
21 operating plant. Let me add, this estimate does not include
22 the cost of replacement power.

23 As a final point we believe that the in-service
24 states mandated in the proposed rule are totally
25 unrealistic. Significant new requirements have been

1 proposed which were not identified in the previous
2 documents. To engineer, design and install the new
3 requirements of Appendix B per the rigid schedules specified
4 is physically impossible.

5 Implementation schedules should be reasonably
6 related to the ability of the licensees to implement changes
7 on a timely orderly basis.

8 The separate comments of Commissioners Hendrie
9 and Kennedy suggest an awareness by some of the
10 Commissioners that the implementation schedules proposed are
11 totally unreasonable. Should the schedule remain as
12 documented the results would be that most operating plants
13 would not be allowed to operate after November 1, 1980. The
14 impact of such a situation on power availability and thus
15 the economy of this nation needs no further explanation.

16 In summary, licensees have not been delinquent or
17 evasive as suggested or as the Commissioners have been led
18 to believe. Licensees have actually expended considerable
19 energy in terms of time and resources to carefully evaluate
20 every requirement and hazard on a case-by-case basis thus
21 assuring an acceptable level of fire protection for the
22 specific situation.

23 The Commissioners must recognize their licensees
24 have been responsive and have acted in good faith in a
25 sincere effort to upgrade fire protection and assure the

1 continuing health and safety of the public.

2 I and members of this KMC group would like to
3 extend our appreciation to the subcommittee for providing
4 the opportunity to present factual information which
5 hopefully can be used if Appendix R is issued to revise and
6 strengthen Appendix R to a practical, reasonable and most
7 important a useful regulation.

8 Thank you, gentlemen.

9 MR. BENDER: Mr. Roncaioli, a couple of questions
10 even though you asked that we defer questions until the EEI
11 presentation had been made. It seems to me it will be more
12 fresher in people's minds if some of these questions were
13 asked now.

14 You have talked about the combination of events
15 that are being considered in setting the fire protection
16 provisions. As a matter of fact, you alluded to the
17 requirement to be able to accept the SSE and still perform
18 certain fire protection functions in the lube oil leak
19 collection system.

20 Do you have your own views about what events
21 should be combined with fires?

22 MR. RONCAIOLI: With respect to that oil
23 collection system?

24 MR. BENDER: Just in general. I just used that
25 as an example. Should a fire be considered concurrently

1 with an SSE?

2 MR. RONCAIOLI: No, I don't think so.

3 MR. EBERSOLE: May I comment?

4 MR. BENDER: You can comment, but please let the
5 man answer the question.

6 MR. EBERSOLE: I know, but it is going to
7 influence what he says.

8 MR. BENDER: You can influence him later.

9 (Laughter.)

10 MR. BENDER: Go ahead.

11 MR. RONCAIOLI: Your question is what are my
12 thoughts with respect to postulating a fire concurrent
13 with an SSE?

14 MR. BENDER: The presumption is that the industry
15 participants must have gone through some kind of rational
16 process to decide which events should be combined with which
17 events, and I just selected one pair to illustrate. Should
18 an SSE and a fire be a common event? Somehow or other I
19 have some trouble being very comfortable with your criticism
20 of the requirements.

21 MR. RONCAIOLI: Well, some utilities have
22 installed an oil collection system and that hazard was
23 evaluated at their power facility. A lot of factors go into
24 such a decision. You really have to see what the layout is
25 of your pumps so if an SSE event does occur then you would

1 have to see if a fire could result from that occurrence.
2 The design of the plant, where your steam lines, where your
3 ignition source is and where your safety-related cables are,
4 those are all factors to consider. In Northeast Utilities
5 this was evaluated based on that. We didn't believe such a
6 dual event could occur at our facility.

7 I am sure most utilities have had to look at
8 their power plant in that light, in that vein. I know all
9 the fire protection considerations that we have looked at we
10 have always looked at safety first; NRC requirements
11 secondary and safety first. That is the way we handle every
12 fire area zone per se that we looked at.

13 MR. BENDER: Go ahead, Jessie.

14 MR. EBERSOLE: I was going to say before you
15 answered that to consider the following. In the heavy
16 electrical power systems the trip functions which cause
17 circuits to be cleared in the event that they are upset in
18 some way by the seismic event such as pumps binding and so
19 forth which are not seismic in character, those trip
20 functions are ordinarily piloted by a non-seismically
21 competent battery system and associated DC circuitry. You
22 therefore have the combination of a non-1-E and quite vast
23 system network which is incapable of tripping under
24 overloads of a great variety of kinds now in the presence of
25 earthquakes. Such overloads without the tripping functions

1 tend to generate firest en masse. Do you follow me?

2 MR. RONCAIOLI: Yes.

3 MR. EBERSOLE: Therefore I have never found it
4 really reasonable to say that you can dissociate fires from
5 seismic events and non-1-E circuitry.

6 MR. RONCAIOLI: I think one of the assumptions
7 was just total loss of offsite power and then you postulated
8 fire. That is the way we have looked at some of our areas.
9 I think that is the point we really object to.

10 MR. EBERSOLE: Well, I am talking about the
11 persistence of circuits unable to disconnect themselves.
12 You understand you cannot disconnect offsite power unless
13 you have trip functions.

14 MR. SUMMA: Can I answer that?

15 MR. EBERSOLE: Yes.

16 MR. BENDER: Would you identify yourself, please.

17 MR. SUMMA: My name is Joseph Summa from
18 Northeast Nuclear Energy Company. Our trip functions on
19 breakers for large pumps is provided through DC from our
20 battery system which is redundant. We have an A&P battery.

21 MR. EBERSOLE: Is that for the non-1-E equipment
22 like main coolant pumps and accessory apparatus in the
23 turbine hall?

24 MR. SUMMA: We are BWR, non-1-E equipment.

25 MR. BENAROYA: What about Conn Yankee?

1 MR. BENDER: We may as well hear a little bit of
2 this logic, Vic. Don't confuse it by too much. Let's hear
3 what it is for BWRs.

4 MR. EBERSOLE: You may be telling me you are one
5 of these utilities that has just two batteries and both of
6 them are 1-E; is that right?

7 MR. SUMMA: Our batteries are 1-E, yes.

8 MR. EBERSOLE: All of them?

9 MR. SUMMA: Both.

10 MR. EBERSOLE: Both of them, and that is all
11 there is, right? You have two battery systems and they are
12 both 1-E and that is all you have got on battery systems; is
13 that correct?

14 MR. SUMMA: On batteries providing power.

15 MR. EBERSOLE: You have another problem which is
16 the fact that you have got just two batteries on which a
17 current study is being performed by NRC.

18 MR. BENDER: I was trying to develop a point and
19 not to go into detail about the designs. I am not sure what
20 the regulatory staff requires either. They have made some
21 postulations about when a seismic event should be combined
22 with a fire and when not. In a way they have shown up for
23 the first time in some of these leasing requirements. I
24 think that is a point that is being made.

25 Can I ask the regulatory staff to say how is it

1 establishing a basis for deciding what events are combined
2 with fire?

3 MR. FERGUSON: I will speak just to the operating
4 plants, Appendix A. There are no seismic requirements in
5 Appendix A for the operating plants. When we got into the
6 rule situation and finally getting a final position on this
7 reactor coolant system that is the first place we introduced
8 the seismic requirements for the reactor coolant system, or
9 for the oil collection system. We did it on the basis of
10 here you have a system which contains a combustible liquid
11 above an ignition source. The question is, is it going to
12 leak under a seismic event and, if it does, does it go on to
13 the hot point and initiate a fire. If that happens in
14 general PWRs you have got four such pumps so you have four
15 simultaneous fires.

16 We felt this was one place where combustibles
17 were close to initiation sources and it should be taken into
18 consideration. We examined with some licensees the oil
19 system on the pumps whether or not they were seismically
20 designed and it varied. On some pumps they are and on some
21 pumps they are not.

22 The requirement really is either the oil system
23 is designed to withstand the SSE, that is the system that is
24 circulating the oil in it, and you would not expect that to
25 leak, or you design the oil collection system to collect

1 whatever leakage does occur at that time. That is our logic
2 on it. So you have the choice of either. Most people who
3 have done it haven't had too much problem in meeting the
4 requirement.

5 MR. EBERSOLE: Bob, what did you do about the M-G
6 sets which have a fluid coupling on certain variable speeds?

7 MR. FERGUSON: We didn't look at it.

8 MR. EBERSOLE: Aren't they in the same light?
9 They are non-1-E.

10 MR. FERGUSON: I am not that familiar with it.

11 MR. EBERSOLE: You know, they are in oil pick-up
12 systems.

13 MR. FERGUSON: Right. It sounds like it from
14 what you are saying, but to my knowledge we didn't even look
15 at them.

16 MR. BENDER: This is not a bad place to just stop
17 this particular part of the discussion. When you write
18 something into the rule and say it say it needs to be
19 seismically qualified and you don't put anything else in, I
20 guess if I were looking at the rule I would say, well, the
21 staff has now established what is seismically qualified that
22 is of importance because it wrote down that one thing and
23 there must not be anything else. Is that a correct
24 inference?

25 MR. FERGUSON: No. I think that is a logical

1 conclusion from the standpoint of the way most rules are
2 written. You study something for two or three years with a
3 goal of putting out a rule and you would expect when the
4 rule would be out it would cover the whole situation. That
5 is not the case with this particular thing. Again, the rule
6 was developed specifically to take care of isolated
7 instances and disagreements that we presently have and just
8 simply set policy for those particular arrangements.

9 Originally when we sent it forward to the
10 Commission we did not even reference Appendix A the way it
11 is now. The Commission requested that to more, I guess,
12 indicate that these were not the only requirements for fire
13 protection systems in the plant. Once you put out the rule
14 then people identify it as this is the rule, this is all the
15 requirements. I don't have to do anything else in Appendix
16 A and that is fallacious or wrong I should say.

17 MR. BENDER: Any other questions at this point?

18 MR. EBERSOLE: I am fearful that that rule that
19 pertains to the main coolant pump oil systems implies that
20 is the only one like that. As a case in point it didn't
21 accommodate the problem of the fluid coupling problem on the
22 frequency changes where you would have a similar problem in
23 respect to loss of oil and the spraying of it and fires.

24 MR. BENDER: Well, I couldn't read into the
25 Branch Technical Position how those things would be

1 combined. I can infer that they ought to be looked at, but
2 I can't find the Branch Technical Position is very explicit
3 on it.

4 MR. FERGUSON: Appendix A is very explicit. It
5 just leaves out the seismic requirements that are in the
6 Branch Technical Position for new plants. The only
7 requirement in new plants I believe is the host station's
8 stand-pipe system is seismically designed. You have the
9 other requirement from the standpoint of Reg I-129 that any
10 system in a safety area is supposed to have some sort of
11 seismic design so it doesn't fall apart and create problems
12 and that sort of thing, but there is no requirement to
13 remain functional.

14 MR. BENDER: Why don't we go on to Mr. Sawyer.

15 PRESENTATION OF EDWARD A. SAWYER, YANKEE ATOMIC
16 EEI REPRESENTATIVE

17 MR. SAWYER: My name is Edward A. Sawyer. I am
18 the Fire Protection Coordinator for Yankee Atomic Electric
19 Company.

20 In this position I am responsible for the fire
21 protection programs at three operating plants and one which
22 is under construction.

23 I am a member of the Atomic Energy Committee of
24 the NFPA, the National Fire Protection Association, and also
25 a member of the Nuclear Fire Protection Committee for the

1 American Nuclear Society.

2 I am here as a member of the Fire Protection
3 Committee for the Edison Electric Institute and my comments
4 today are being made for the Institute on behalf of its
5 member companies. The Institute has submitted formal
6 comments to the NRC's staff on the proposed rules. A copy
7 of those formal comments is attached to my testimony which
8 you all have in front of you.

9 My testimony will highlight many of the general
10 problems we have with the NRC's proposed rule and I refer
11 you to the formal comments for a recital of EEI's objections
12 to any specific requirements that have been proposed.

13 At the end of my presentation I would be happy to
14 discuss any of these objections with you.

15 EEI and its members support sound fire protection
16 measures of nuclear power plants. In fact, member companies
17 have worked cooperatively with the NRC staff and have
18 implemented many improvements in plant fire protection
19 during the past several years.

20 The working relationship with the staff has been
21 such that sound fire protection, taking into account site
22 specific factors at existing nuclear units, is in fact now
23 being implemented.

24 At this point I would like to take issue with an
25 NPC statement that fire protection is not site specific. We

1 feel that there are certainly many areas of fire protection
2 that are not site specific, but there are just as many that
3 are in fact very site specific.

4 The NRC's decision to pursue decision-making for
5 17 fire protection issues is a departure from the
6 Commission's past practice in specifying standards for
7 nuclear units through regulatory guidelines.

8 In pursuing this approach we feel that the
9 worthwhile attributes of the prior approach will be lost.
10 Particularly, we are worried that the flexibility to
11 accommodate particular requirements to the site specific
12 constraints at existing plants will not be maintained.

13 Furthermore, we are fearful that regulations
14 which arbitrarily abrogate those standards agreed to in
15 staff safety evaluation reports or SERs will shatter the
16 reliance which utilities have felt justified in placing upon
17 prior staff determinations in the fire protection area and
18 in other areas.

19 While we endorse and encourage sound fire
20 protection standards, we do not think the NRC has proposed
21 regulations that are sound procedurally or in terms of their
22 content.

23 Our general objections include:

24 First, the inadequacy of the technical data and
25 justification supporting the proposed rules;

1 Second, the abbreviated 30-day comment period;
2 Third, the abrogation of existing SERs;
3 Fourth, the arbitrary November 1st, 1980,
4 implementation deadline; and
5 Five, the need for more flexibility in adoption
6 of regulations.

7 EEI believes the preamble to the proposed rule is
8 deficient for its failure to provide the technical basis or
9 rationale for the proposed regulations including certain new
10 requirements not previously subject to public debate. These
11 include, among others, the requirement for 50-foot
12 separation, for the maintenance of a pressure differential
13 across a fire barrier penetration during qualification
14 testing, for consideration of associated circuits and for
15 the general application of the provisions of the rule to
16 safety related areas and those areas important to safety as
17 well as safe shutdown structures, systems and components.

18 As was previously stated, the comment "important
19 to safety" is something that is subject to a great deal of
20 interpretation by whoever comes in with the rule in their
21 hand to make any kind of an inspection of the plant and to
22 make some kind of a decision on whether your fire protection
23 is adequate or not.

24 The NRC's failure to disclose a technical basis
25 for the standards it proposes to adopt prevent those who

1 will be directed by them from offering meaningful comment.
2 You can imagine the results.

3 Licensees will be forced to undertake extremely
4 costly and difficult retrofitting of existing facilities
5 with associated unit shutdowns in order to comply with the
6 requirements that may have no technical justification.

7 Complex engineering considerations are at issue
8 in many of the proposed requirements. Whether a technical
9 basis exists for them and whether they can be implemented at
10 existing facilities are questions that need to be
11 addressed. Whether existing nuclear units can be
12 retrofitted in accordance with these standards without
13 jeopardizing other safety features incorporated in the
14 plants as presently designed is of serious concern to this
15 industry.

16 We do not feel that the NRC has addressed this
17 issue. That being the case we feel the NRC should not adopt
18 those regulations before setting forth their technical basis
19 and reviewing meaningful responses from industry and other
20 experts.

21 The Commission has chosen to restrict the comment
22 period severely on this document based on what we feel are
23 two basically false premises.

24 First, the position of the staff and the
25 licensees regarding the provisions of this rule is

1 documented and well known; and

2 Second, the public has been afforded several
3 opportunities to comment on the provision of the rule.

4 While it is true that many of the issues involved
5 are well known and have been under discussion for several
6 years, many of the particular solutions in the proposed
7 regulations and some of the issues are in fact being
8 proffered for the first time and without supporting
9 technical justification and rationale.

10 The only previous comment period relied on by the
11 NRC as a basis for shortening this comment period on the
12 rule involved Draft Regulatory Guide 1.120 and occurred
13 approximately three years ago.

14 Considering the technological changes in the
15 interim, the substantially different requirements being
16 proposed and the change in status from a guideline to a
17 rule, the proposed regulation should be accorded a far
18 longer comment period.

19 Meaningful comments containing reasoned
20 alternatives and technical bases for all the issues are very
21 difficult to develop in this time frame. The short comment
22 period aggravates the problem created by NRC's failure to
23 justify its proposed regulation.

24 We hope you agree that more time is needed for a
25 full public airing of the technical justification for sound

1 fire protection standards that take into account the
2 constraints imposed by site-specific factors at existing
3 units.

4 The Commission bases its decision to propose fire
5 protection regulations on the inability of the NRC staff and
6 the utilities to resolve only 17 generic issues, some or all
7 of which arise at only 32 units. However, in its eagerness
8 to resolve the few remaining issues we feel the NRC is
9 guilty of a case of regulatory overkill. The effect of its
10 regulation would be to abrogate the terms of all SERs
11 negotiated in good faith by NRC staff and operators.

12 Many of the previously approved modifications
13 have been or are in the process of being implemented at this
14 time. To now discard all SERs which only weeks ago were
15 considered by all interested parties to compel
16 implementation of sound fire protection standards we feel
17 would be arbitrary and inequitable and unnecessarily costly.

18 As a minimum, requirements of SERs which have
19 been or are being implemented should not be superseded by
20 the propose^d regulations unless NRC publishes findings that
21 these requirements do not fulfill the objectives and intent
22 of the new regulations in the site-specific context of
23 existing units.

24 Across-the-board application of the regulation as
25 proposed will result in significant expenditures.

1 Preliminary estimates vary from \$2 million to \$50 million
2 per unit, depending upon the specific plant design. This
3 does not include replacement energy costs for the required
4 down time. This would be done with little or not
5 commensurate improvement in plant fire protection over that
6 which has been achieved already by the design approaches
7 taken in various accepted SERs.

8 You can understand our dismay at the thought of
9 incurring such expenditures over and above those already
10 occurred to come into compliance with the SERs. Utilities
11 should be compelled to incur them only if NRC provides
12 convincing justification that the proposed regulatory
13 standards will provide a commensurate degree of additional
14 protection.

15 We are also concerned, as are Commissioners
16 Hendrie and Kennedy, with the proposed implementation
17 schedule. A partial survey of our member companies
18 operating nuclear facilities, 15 in all, as well as a
19 partial informal survey conducted by the NRC with 22
20 companies responding indicated that none of those queried
21 could comply with the regulations as proposed by November
22 1st, 1980.

23 We have already heard that the rule itself will
24 not be coming out until sometime in October. That really
25 doesn't leave very much time for us to look at the rule and

1 get implementation made by November 1st.

2 It is generally agree that if the present
3 schedule is maintained all of our affected member companies,
4 51 companies operating 58 nuclear plants, will be subject to
5 shutdown orders on November 2nd, 1980, unless the Commission
6 grants exceptions for good cause shown.

7 The Commission has stated it anticipates
8 approving few, if any, extensions. As you can imagine, even
9 if all necessary design and analyses were completed today,
10 equipment to be installed would not be available prior to
11 that implementation date.

12 In light of the impact upon consumers and the
13 national economy of shutting down of nearly all of the
14 nuclear reactors in the country we have recommended and we
15 urge you to support the replacement of an arbitrarily
16 selected implementation date with a realistically achievable
17 schedule based on the extent of the required retrofit for
18 the individual plants affected.

19 When developing revised implementation schedules
20 the NRC should consider permitting refueling or other plant
21 outage periods to be used to make any of the modifications
22 which can only be performed when the units are out of
23 service.

24 As you know from reading the proposed
25 regulations, they are specific and restrictive. I think

1 industry testimony prior to this has come up with the same
2 problems. In most cases they don't recognize acceptable
3 alternate solutions. Instead they dictate a particular
4 design approach without consideration of site-specific
5 factors.

6 We recognize such an approach may be possible for
7 plants in the design and even the construction stage, but it
8 is totally unacceptable and impractical for existing units.
9 We respectfully suggest that the NRC staff could not taken
10 into account all the site-specific variables at existing
11 units when it developed these detailed design requirements.

12 Recognizing that the staff has had difficulty
13 with the interpretation of the staff's guidelines by
14 utilities we feel that a more effective approach would be to
15 restate the regulatory guide to clarify the ambiguities
16 which have resulted in disagreement or to accept existing
17 industry standards rather than to propose regulations which
18 dictate a specific design approach. The latter procedure is
19 not only unnecessary but it may very well be
20 counterproductive. In these regulations the staff may be
21 dictating a design that will have a detrimental effect on
22 other safety considerations at some plants.

23 If a clarification of the existing regulatory
24 guide or acceptance of industry standards is unacceptable,
25 at a minimum the regulation should only establish

1 performance standards. Licensees should be permitted to
2 select the most appropriate designs to achieve those
3 standards based upon the constraints imposed by
4 site-specific considerations at their units.

5 If the Commission feels compelled to specify
6 designs in certain contexts, then the regulation should
7 include a variance procedure applicable when a licensee
8 demonstrates that the specified design is not appropriate in
9 a site-specific context. In those rare cases where there is
10 only one acceptable solution we feel it is incumbent on the
11 staff to provide justification for that position.

12 In summation, my remarks have brought to your
13 attention our major concerns which are:

14 We feel the NRC's proposed regulations are an
15 overreaction to good faith disagreements that have arisen
16 under existing regulatory guidelines.

17 We question the lack of technical data and
18 justification supporting the new issues contained in the
19 proposed regulations.

20 For the reasons we have given, the proposed
21 regulation should be revised and repropoed for an
22 additional comment period more appropriate to the complexity
23 of the issues raised during which all interested parties can
24 openly debate the merits of the proposed regulations; and

25 After a full debate on the repropoed regulations

1 if the Commission still feel compelled to issue a
2 regulation, a more realistic compliance date must be
3 established. In addition, the regulations revised in
4 response to such public debate should be applied only to the
5 32 plants with existing open items and only to those issues
6 that remain unresolved.

7 The Edison Electric Institute wishes to thank the
8 Subcommittee on Fire Protection for this opportunity to
9 discuss on behalf of our member companies our objections and
10 recommended alternatives to the proposed significant fire
11 protection regulations.

12 MR. BENDER: Thank you, Mr. Sawyer.

13 We may have a couple of questions for you, but
14 let me first ask the staff a question that seems to be
15 recurring here.

16 Apparently the schedule is unrealistic. Is there
17 anybody on the staff reconsidering the schedule?

18 MR. BENAROYA: Yes, this is one of the items that
19 we are going to bring to the Commissioners' attention again.

20 MR. BENDER: I am sure the committee could
21 comment on the unrealism in the schedule and no one would
22 debate it.

23 MR. BENAROYA: We are looking at this truthfully
24 from our point of view. With the dates that are now in the
25 rule we are going to be flooded with exemptions. We will

1 have to evaluate those exemptions and tell the Commissioners
2 which ones to accept and which ones to reject. That alone
3 will take a lot of time which we think is
4 counterproductive. That is the reason we don't like it.

5 MR. BENDER: I see.

6 Mr. Sawyer, there were a couple of points I
7 wanted to ask you about. Evidently there are some 32 plants
8 that have provisions that don't meet the new rule. How many
9 of those plants conform to Branch Technical Position 9.5.1
10 and are operating because the staff has granted them
11 exception or accepted their alternatives or whatever?

12 MR. SAWYER: The number 32 comes from information
13 that the NRC has given to us. It is not a figure that we
14 have looked at throughout the industry.

15 MR. BENDER: So you really don't know how many of
16 those companies that you represent really comply with the
17 Branch Technical Position as it exists now nor how many of
18 them will comply with the new rule?

19 MR. SAWYER: I can tell you that based upon our
20 own survey of the companies that operate nuclear power
21 plants there is possibly TVA that does comply. Of the other
22 companies we have asked we have gotten nobody that has said
23 they do comply in fact with Appendix R. Now, we have not
24 contacted everybody, all members of EEI I am sure.

25 For my own three operating plants we do not

1 comply with Appendix R. We have at all plants one to three
2 open items which are addressed in Appendix R. We know they
3 are open items. We feel that we have good engineering
4 judgment for leaving them open, or let's say for opposing
5 the NRC's position.

6 For items other than the known open items in my
7 three operating plants I feel there are perhaps between
8 seven and ten areas where we do not comply with the Appendix
9 R. However, we do have agreement with the NRC that what we
10 have proposed as alternatives to the BTP are acceptable.

11 MR. BENDER: In the plants that you are concerned
12 with and actually have responsibility do you know whether
13 the things that are open items or debatable or whatever way
14 you want to express them are open because you think it is an
15 unnecessary expenditure of money or because they are adverse
16 to what you might consider either safety or operational
17 reliability interests?

18 MR. SAWYER: In the three plants that I represent
19 there are not items that remain open because we feel that to
20 go along with what the staff asks for would damage the
21 potential for a safe shutdown of the plant. All our open
22 items are based either on cost considerations or on the fact
23 that we have an engineering evaluation which says that it
24 does not have to be done; the concern that the NRC has come
25 up with does not exist.

1 MR. BENDER: Are those documented somewhere?

2 MR. SAWYER: Yes.

3 MR. BENDER: Actually it would be useful if every
4 utility could provide that kind of listing of things so that
5 at least when we were talking to the Commissioners we had
6 more concrete evidence of where the issues were. It is not
7 too easy for me as an individual to go down and find out
8 where each plants takes exception to the proposed criteria
9 and so on. I have to take on faith what you are telling me,
10 but I also heard Mr. Ferguson say that there are only two
11 plants that don't comply with the things that are in these
12 criteria. Somehow those two numbers just don't add up.
13 Something is funny somewhere.

14 MR. FERGUSON: I don't think I said that there
15 are only two plants that don't comply with these criteria.
16 When we started out I would say every plant that doesn't
17 comply maybe there was one or two items.

18 MR. BENDER: I apologize, Bob. I misinterpreted
19 you. Sorry.

20 MR. FERGUSON: There is a quandary on our part.
21 I think one thing that you have heard in the various
22 discussions between the utilities and ourselves and what we
23 have said to the Commission and what the Commission has said
24 back to us, there are a few instances where people don't
25 comply with rules because of changes we are making. We

1 think that is small.

2 Let's say some plant, as a lot of these gentlemen
3 represent, where there has been a cooperative effort and we
4 are down to one or two open items, and in some cases it is
5 whether we are going to have three or five men, whether the
6 shift supervisor is going to be on the thing or whether we
7 are going to have four drills a year or three drills a year,
8 that type of thing, where these numbers of \$50 million and
9 so forth comes from. The only way I can see those plants
10 are those people who really haven't made many
11 modifications. Their plants today are not much different
12 than they were before and you are doing it now.

13 I think there are a few cases where there are
14 basic disagreements, technical disagreements between certain
15 licensees and the staff. I wouldn't say it is a fight or
16 they are stonewalling it, that sort of thing. There are
17 different professional opinions on what is enough. We are
18 in a gray area here. The purpose of the rule from the
19 Commission is to put a bottom line on it, and this is where
20 the area is going to stop. That is all.

21 MR. BENDER: Well, one of the ways in which one
22 could make a judgment on some of these things, since many of
23 these plants have parallel designs, is to be able to look at
24 what has been done in one case and compare it what would
25 have to be done in another. I think that is what most

1 engineering people do when they are trying to determine
2 whether the arguments are valid or not. If there is a
3 precedent for doing something and somebody has already shown
4 it is practical to do it, even though I may not agree with
5 the desirability of doing it, I can accept the practicality
6 of something if it has already been demonstrated.

7 I can't tell right now whether in some cases
8 those that are objecting to detailed refinements are
9 objecting because they just disagree even though some other
10 plant has done it or whether there is a real reason why it
11 is impractical for that specific case. In some cases I am
12 sure it is site dependent because of individualized designs,
13 but the message doesn't come out very clear up to now.

14 MR. SAWYER: I think if you look at the specific
15 comments that came in from EEI, and I feel also from the KMC
16 group, you will find that there are in fact not many that
17 could be classed as major items.

18 The main problem that I feel the industry has is,
19 as you suggested before, what happens to this rule once it
20 goes in. Do we go back and start from time zero and do a
21 whole new fire hazard evaluation at our plants on the items
22 that we agreed to and reached agreement upon in previous
23 licensing battles, if you will, discussions perhaps is more
24 appropriate? Will those be opened up again and will we have
25 to go back?

1 Our position I think is perhaps pessimistic in
2 that we say somebody, an INE inspector, anybody that wants
3 to really can take the rule, the proposed rule or regulation
4 and say, look, it says here in black and white that you have
5 to do that. So don't tell me that you did something that is
6 just as good because you don't say that. It is not allowed
7 any more. That I think is one of the major points that we
8 wish to get across to you we would like to see changed.

9 MR. BENDER: That is certainly a valid point and
10 it is one which I think many members of the committee have
11 an equivalent interest in. When you start making the
12 arguments on the basis of engineering details then you are
13 not making the same argument. I think the argument was made
14 a couple of time that the rule itself has some legal aspects
15 that are of serious concern with respect to the ability to
16 keep the plants operating. I am sure we want to bring that
17 to the attention of the committee. The engineering details
18 are something else again and I am not clear yet whether
19 those things are big issues or small issues.

20 MR. SAWYER: I think if you pick, for instance,
21 the engineering detail requiring retests on all
22 penetrations, penetrations through fire barriers with a
23 pressure differential across and look at the schedule, we
24 know that there is one test lab in the country that can do
25 that. There probably would be a lot more in a hurry if
 everybody

1 was required but nonetheless the procedure of getting that
2 test done for all the plants in the country could run to two
3 or three years and could be extremely costly.

4 MR. BENDER: You know, a few illustrations like
5 that would help carry the message a lot better than the kind
6 of arm waving that we are getting right now. We do need
7 some explicit examples.

8 MR. SAWYER: Many of these things have come in
9 and specific comments have been sent to the Commissioners
10 themselves. They did not come out in this particular
11 meeting due to time constraints and due to the fact that my
12 position is as a spokesman for EEI and I can't begin
13 dragging site-specific particular items out.

14 MR. BENDER: I am sympathetic to your view and
15 even to the need for time, but I do think that you are
16 expecting a lot from the Commissioners in expecting that
17 they will be able to digest individual comments and add them
18 all up and deal with them in some way. Somebody has to take
19 the initiative to collectively judge how these things
20 stand. I am really very much concerned that the staff
21 hasn't done it either.

22 MR. BENAROYA: May I interrupt you?

23 MR. BENDER: Sure.

24 MR. BENAROYA: We have issued those regularly.
25 Right now we have undertaken exactly what you are saying. I

1 don't know if it will come in time for you, by the time you
2 need to make the recommendations, but we are looking at each
3 licensee on open items that are there, why they are open and
4 have sent a letter to each licensee explaining that these
5 are the open items.

6 I want to make it again clear that the staff also
7 understands this problem and we concur with the industry
8 that we don't want to leave you all the items that they have
9 been closed and they have been accepted by us. We don't
10 want to do that over again either.

11 MR. BENDER: Vic, I hope that is more of a
12 personal opinion.

13 MR. BENAROYA: I am giving you the staff's
14 opinion. I am giving you, you know, the management's
15 opinion.

16 MR. BENDER: Okay.

17 MR. BENAROYA: We still have to live with what
18 the Commissioners tell us to do.

19 MR. BENDER: Well, I think that their ability to
20 address the problem is very much dependent upon getting that
21 information in advance.

22 I will repeat what I said before. Giving them
23 individual descriptions of each plant is awfully hard to
24 digest. As a matter of fact, it looks like just hodgepodge,
25 you know, that there is no way to put the information in a

1 form where you can see collectively what exists. It is very
2 hard for anybody to make a judgment about whether it is more
3 than a miscellaneous mess of complaints that they are trying
4 to deal with.

5 MR. FERGUSON: One other thing I would like to
6 mention here, and it goes in with the example Ed gave and
7 one statement he made. He made a statement there is a
8 requirement for a 50-foot separation and who can provide
9 that. There is no requirement for a 50-foot separation.
10 That puts a top line on it. That said if you have got
11 50-foot or better you don't have to worry about it. Now,
12 there is a lot of that kind of thing in some of the comments
13 that we are getting in and it make it very difficult.

14 MR. EBERSOLE: I don't see the physical basis for
15 50 feet. It doesn't say whether it is 50-foot vertical or
16 50-foot horizontal or whether it is a distance in feet which
17 can be breached by ductwork or whatever. As a matter of
18 fact, I fail to see where 50 feet or "X" feet for that
19 matter provides for fire separation.

20 MR. BENAROYA: Mr. Ebersole?

21 MR. EBERSOLE: Yes.

22 MR. BENAROYA: I hate to disagree with you.

23 MR. EBERSOLE: I don't mind.

24 MR. BENAROYA: We do have an evaluation analysis
25 of that and we would like to send it to you. It is done by

1 our consultants. It is 20 feet by the way.

2 MR. EBERSOLE: Say that again?

3 MR. BENAROYA: Twenty feet.

4 MR. EBERSOLE: Twenty feet?

5 MR. BENAROYA: Twenty.

6 MR. BENDER: I thought it was 20 and you said,
7 well, we will allow something so we will go to 35.

8 (Laughter)

9 MR. BENDER: Now you have gotten to 50 and there
10 is a big difference.

11 (Laughter)

12 MR. BENAROYA: In this case the analysis is based
13 on 20 feet. It doesn't come out as a hundred percent safe.

14 MR. EBERSOLE: Fifty feet to me sounds like an
15 extremely weak and arbitrary and inconclusive way to
16 separate things as contrasted to, say, a two-foot thick
17 concrete wall. Do you follow me?

18 MR. BENAROYA: Yes, of course. I will be glad to
19 send you the analysis that we have for 20 feet explaining
20 the reason for that.

21 MR. SAWYER: EEI's comment is not that the 50
22 feet is unrealistic. Our comment is that there has been no
23 justification provided for that 50 feet. There is nothing
24 we can comment on. There is a statement that says if it is
25 50 feet, that is fine. If it is less, it is not. There is

1 no justification.

2 MR. BENDER: Are you aware of the consulting
3 report? Babcock did that study?

4 MR. BENAROYA: Yes.

5 MR. BENDER: Are you aware of that study?

6 MR. SAWYER: No.

7 MR. EBERSOLE: Is that 50 feet an open space or
8 in a confined room?

9 MR. SAWYER: The other thing we would say is that
10 even if these reports are available, the 30 days that we
11 have to get the reports and comment on them is not adequate.

12 MR. BENDER: I didn't have to have Mr. Benaroya
13 tell me that report existed. I have had it for more than a
14 year. It was in the public document room for at least that
15 length of time. For some reason or other these kinds of
16 reports which the industry ought to be just as interested in
17 as the regulatory staff don't seem to be of any interest to
18 the industry. Why is that?

19 MR. SAWYER: I cannot speak for the industry. I
20 can speak for me and say that, yes, that would be of
21 interest to me if I knew it existed.

22 MR. BENDER: Well, have you been down to talk to
23 Mr. Benaroya or whomever it is about what kind of
24 information they have been developing that is the basis for
25 these rules?

1 MR. SAWYER: Bob and I have talked considerably I
2 would say over the past three or four years.

3 MR. EBERSOLE: This room is about 50 feet long.
4 I can have a big switchboard fire here. This is a confined
5 space. The ambient temperature developed as a result of
6 that can easily shutdown the switchboard at the other end
7 even though it is on another train. That to me illustrates
8 the ambiguity of a 50 foot separation.

9 MR. SAWYER: If the fire went long enough.

10 MR. EBERSOLE: There are lots of qualifiers.

11 MR. SAWYER: That is right.

12 MR. BENAROYA: I am sorry, but I have to object
13 again here. There is a basic philosophy problem here. We
14 are saying that 50 feet is safe. Anything under it
15 justifies it. I thought that that is really the way that we
16 do business, because if we said 20 feet or 30 feet or a
17 specific number then we are telling them again how to design
18 the plant which is the big thing that we have. I thought
19 the justification of all of these numbers should come from
20 industry and not from NRC.

21 MR. BENDER: Nobody has a quarrel on
22 justifications. You are right. You do give them some
23 latitude to justify things that are less. In some cases you
24 do and in some cases you don't.

25 The point I am trying to make is even though I am

1 very sympathetic and I am sure the committee is to the way
2 in which this rule is being promulgated, it does make sense,
3 too, to suggest that the industry ought to be trying to find
4 out what the bases are as well as complaining about the fact
5 that the rule exists and some of it could have been done a
6 long time ago because these arguments have been going on for
7 at least a year and maybe longer. I guess I am a little
8 surprised in spite of the reaction to the rule that the real
9 substance that you could base the debate on still is in the
10 verbal stage. There is nothing very well written down so
11 you can see whether the answers have engineering substance
12 to them.

13 MR. SAWYER: I think that perhaps one of the
14 problems that has existed, as I recall this 50-foot
15 separation, is that it was something that was developed for
16 new plants and not necessarily for old plants. Those of us
17 who are concerned with operating plants could have, and I
18 can't say that we did, could have just said that is a new
19 plant criteria and has nothing to do with us so we won't
20 even worry about it. We will make do with what we have got
21 and design with what we have.

22 MR. BENDER: There was a comment back there.

23 MR. PATRISSI: My name is Greg Patrissi. I am
24 with Florida Power and Light.

25 There has been a tremendous amount of

1 documentation between our utility and the NRR and INE on
2 fire protection since I have been with FP&L which has only
3 been two years. We have five volumes of correspondence
4 between us and the NRC.

5 We have also demonstrated a fire hazard analysis
6 for which we use sound engineering principles, fire
7 protection, and we have demonstrated that we could
8 effectively shut down a plant in postulated unrealistic type
9 fires. We have demonstrated this from an engineering
10 standpoint.

11 We have been asked by the Commission to upgrade
12 our facilities. We have spent millions to do it. We are in
13 the process of upgrading these facilities and now we may
14 have to go back because of this rule and rip out things that
15 we have already installed in order to meet these new design
16 requirements such as SRCs and RCPs.

17 I am one of the utilities that is fighting a
18 three-man fire brigade. We have established in our response
19 to the Commission on the proposed Appendix R our stance on
20 the five-man versus three-man fire brigade. We feel that
21 when you look at NUREG guide 0050 which says that in
22 analyzing your fire brigade requirements the offsite fire
23 protection agency must be considered when you postulate
24 unrealistic, large type fires in defending the five-man
25 versus three-man fire brigade.

1 At our Turkey Point facility we have two of the
2 highly trained fire departments in the United States. One
3 is Homestead Air Force Base made up of professionally highly
4 trained aircraft firefighters who are trained in flammable
5 liquid fire fighting. They are eight to ten minutes from
6 the plant.

7 We have Metro Fire Department which is a paid
8 fire department where the average firefighter receives over
9 300 hours of hands-on training before he qualifies as a
10 firefighter. They are ten to twelve minutes away.

11 We feel that the offsite fire department, NUREG
12 guide 0050, is adequate to provide fire protection for
13 unrealistic type fires. We were asked under NUREG guide
14 0050 to postulate fighting fires, small type fires, and to
15 provide the necessary manpower and training to do this. We
16 were asked to hold in check large fires until the offsite
17 fire department could arrive within 30 minutes.

18 When the INE people, fire protection review team,
19 came to our St. Lucy facility, and this is stated in our
20 SER, they mandated a five-man fire brigade based on a fact
21 that when they went by the fire house the fire engine was
22 out of the fire house. That was their technical basis for
23 ratching us into a five-man fire brigade.

24 Gentlemen, we feel that three men can fight fires
25 at a nuclear power plant. I base this on my professional

1 experience as a paid professional firefighter and my many
2 years of firefighting experience. We did commit to the NRC
3 that we would provide two additional personnel that we
4 classify as gophers, people that could pick up additional
5 fire brigade equipment such as Scott air bottles, fire
6 extinguishers, additional hoses so we could postulate or
7 have added support if we had a fire, depending now on in
8 what area of the plant that we had the fire.

9 The NRC says based on your finding a fire brigade
10 we have to assume a vast number of things, and I would like
11 to read these to you.

12 This was a response submitted on June 30th
13 concerning the Appendix R in which we addressed the five-man
14 fire brigade issue. In developing the five-man fire brigade
15 scenario for nuclear power plants the NRC has postulated the
16 following sequence of events.

17 Assume a fire starts. That means failure of
18 housekeeping and ignition sources and our procedures have
19 failed. Assume a fire is not extinguished in its incipient
20 stage. That means failure in existing fire detection system
21 and failure in fire suppression systems. Assume additional
22 fire extinguishers and hose lines and ladders must be
23 obtained. We have fire extinguishers on the wall of over
24 140 in the plant. We have 20 to 30 standpipes. We have a
25 fire house fully equipped.

1 Assume heavy conditions require a portable smoke
2 ejectors. In an open air plant this is not a realistic type
3 of assumption. Assume energized equipment must be
4 deenergized and we require the use of a protective water
5 shield. That is a good postulation. Assume a second hose
6 line for back-up must be laid. Assume a flammable liquid
7 fire requires portable foam equipment. In a safety related
8 area flammable liquids are minimized.

9 Assume fire confined spaces and its exact
10 locations cannot readily be determined. Assume a fire
11 brigade member becomes trapped or incapacitated in any way.
12 Assume off-site people must be broken into teams having a
13 fire brigade member assigned as a leader.

14 Assume inclement weather prevents off-site
15 assistance from responding in 30 minutes. Fortunately in
16 Florida we don't have to postulate snowmobiles.

17 Okay, FPL agrees that in the most severe and
18 unusual situation a combination of these assumptions could
19 be postulated. But to assume that all can occur
20 simultaneously is totally unrealistic.

21 We based our justification on the three-man fire
22 brigade based on the factors that we have analyzed,
23 realistic type fires in our facility and we feel that we can
24 support them with three men.

25 Thank you, gentlemen.

1 MR. BENDER: You do have these very good off-site
2 supporting resources. How well trained are they in the fire
3 fighting problems of nuclear power plants?

4 MR. PATRISSI: Basically you have to analyze what
5 you are fighting in a nuclear power plant. Is that
6 different from fighting a fire in an industrial facility or
7 fighting an aircraft fire or fighting a structural fire. In
8 safety-related areas I feel very comfortable in the fact
9 that there is a minimal amount of combustible material and
10 the minimum amount of transients. In FP&L we have covered
11 our cables with flamastic. We have adequate fire stops. We
12 have designed to preclude rapid propagation of fires in a
13 realistic manner.

14 So when you look at an off-site fire department's
15 availability to fight fires in a nuclear power plant,
16 basically what you train an off-site fire department or you
17 instruct them is, one, not to worry too heavily about
18 radiation type protection and whether or not your personal
19 gear is adequate or that you are going to go into the
20 containment at full power and find an RCP oil collection
21 fire, but that the type of fires you are going to be
22 fighting or that we are going to call you for are going to
23 be the ones that we cannot extinguish in the incipient
24 stages such as a turbine lube oil fire, a hydrogen fire, a
25 transformer fire, a fire that occurs in common industrial

1 sites or the secondary site of the plant.

2 Nuclear fire protection and the fire brigade
3 requirements that the NRC is trying to postulate upon us, I
4 feel it very unrealistic for fire brigades. What they
5 asking us to have on site is a highly trained professional
6 fire fighting organization or a fire department.

7 We have asked the NRC in our reviews and our
8 conversations, especially with the INE people that inspect
9 at St. Lucy, what would happen if we had a paid professional
10 fire department located off-site? What is the fire
11 department is relocating their fire house 200 feet from our
12 gate? Sorry, fellows, you still need five men. This is
13 what they base their five-man fire brigade on.

14 We have had tremendous correspondence. You take
15 just Florida Power and Light's correspondence with us and
16 the Commission, our fire hazard analysis, which we far
17 exceeded what their requirements were, and you compare the
18 massive amount of documentation that we have had when we
19 have laid out sound technical engineering principles.

20 We have developed and postulated realistic type
21 fires in our plant and we have successfully shown that we
22 don't need detection, we don't need suppression, we don't a
23 fire brigade, we don't need any extinguishers and that we
24 can still shut the plant down and sustain fires in many
25 areas of our plant based on the combustible loading in that

1 area.

2 MR. BENDER: I think we would all agree that the
3 kind of analysis you are performing ought to show that.

4 MR. PATRISSI: It does, sir.

5 MR. BENDER: There is the question that always
6 lurks in people's minds that the analysis may not account
7 for some circumstance that arises, and if that were the case
8 what would we do about it.

9 MR. PATRISSI: Sir, when you opened a question to
10 Mr. Ed Sawyer that brought me up here was the fact that
11 whether or not we as an industry have demonstrated
12 technically with solid fire protection engineering
13 principles that we could sustain a fire in our facility.
14 Has this been documented? Have we had discussions with the
15 NRC? Gentlemen, we have had discussions with the NRC.

16 MR. BENDER: Well, I believe you. Each utility
17 has done it. The point I was trying to make to Mr. Sawyer,
18 and I will make it again to you, is each group has done it
19 individually. We haven't seen the kind of collective
20 presentation that compares one installation with another. I
21 know of a lot of nuclear power plants that I wouldn't give
22 you a nickel for the fire department within a hundred miles
23 of it.

24 Now, yours may be a lot better. I think it is in
25 a metropolitan area and probably it is better. But it very

1 hard right now to discern those differences and it is also
2 difficult to know whether the people that you can draw on
3 are making the commitment you say they are making. Are they
4 so scared of nuclear plants that they are unwilling to go in
5 there if there is a threat? How do you know that, whether
6 they would or would not respond to that kind of a fire?

7 MR. PATRISSI: We maintain communication with our
8 off-site fire departments. We invite them on our
9 facilities. We go to their fire houses. We talk to them.
10 We set up communications. We establish procedures for
11 calling them. We discuss openly with their people. I
12 personally go into the fire houses and give talks. We bring
13 our health physicists people to give talks. We tell them
14 how they are going to access the plant, where they are going
15 to pick up HP people if they go into the radiation area, the
16 proper TLT and dosimeter. We basically work with them to
17 try to provide a sense of respect for radiation but not a
18 fear for it, to be able to come in and work under our
19 direction to extinguish a fire that may be without our realm
20 of extinguishment such as on a secondary site.

21 You cannot postulate a fire on a secondary site,
22 a large one such as 30,000 gallons worth of lube oil, that
23 we might have a fire under pressure that we would have to
24 call the off-site fire department in.

25 I agree with you that there are facilities in

1 the United States which I do not represent that, and we have
2 some of them in Florida, our fossile facilities, for
3 example, but let's stick with my company, that are out in
4 the sticks, doondocks, whatever you want to call it, totally
5 isolated from a paid professional fire department, that if
6 they did have a fire that they would have to fight a fire on
7 site with the available manpower because it is going to take
8 two hours to get an off-site fire department.

9 MR. EBERSOLE: Let me ask you this question. If
10 I go into a room which is generally called a spreading room
11 or a cable terminal or distribution area and I see an array
12 of cable trays which I know contain circuits that affect
13 shutdown systems, do you and your fire people have the
14 knowledge to be discretionary with respect to performing
15 fire protective functions, spraying those cables in a
16 selective way based on the fact that you know where a
17 redundant configuration of circuitry is or another one is in
18 there so that you do not inundate them both, or do you just
19 go in wholesale?

20 MR. PATRISSI: Well, first of all, if we had a
21 fire in our cable spreading room the only thing we have that
22 can burn is the cable and maybe some switch gear or one roll
23 of computer type printout paper. That is the total
24 inventory of combustibility. We feel with flamastic we have
25 effectively eliminated the combustibile cabling and therefore

1 we will not have the large propagated type fire that we have
2 been asked to postulate.

3 If we have a fire in our cable spreading room,
4 you are looking at a quasi-electrical type fire. Therefore
5 we feel that we can adequately extinguish it with our
6 three-man fire brigade by (1) grabbing the portable fire
7 extinguishers in that area because we do have adequate fire
8 detection, and (2) if we have to use a hose stream, we have
9 been asked by the NRC and we have committed to reduce our
10 inch and a half hose stream which approximately pulls out 75
11 to 100 gallons of water a minute down to 30 gallons of water
12 per minute which means that we would have low flow volumes
13 of water. Our nozzles are E-rated which means we will have
14 a fire pattern and we could effectively go in there and we
15 feel knock down a fire in the very early stages of
16 propagation.

17 MR. EBERSOLE: Well, but I am saying ---

18 MR. PATRISSI: I know what you are saying. Do
19 our people know that train "A" is over here and train "B" is
20 here and this cable runs here and this cable runs there. We
21 have shown in our fire hazard analysis the location of our
22 cabling in regards to safe shutdown capability through a
23 facility. This analysis has been made available to all our
24 NPS's, nuclear plant supervisors, our watch engineers, who
25 are our fire brigade leaders and to the three-man fire

1 brigade, two men on the operational team. But for an
2 individual to go into that room and look at a tray and say,
3 hey, cables X, Y and Z flow through here, I don't think they
4 have that capability to do that.

5 We can say this, that in a cable spreading room
6 we have the necessary cables flowing through and therefore
7 if we have a fire cable spreading room that totally burns
8 the room up we can vacate that area and still successfully
9 shut the plant down in other areas of the plant such as by
10 the Ox building and our switchboard rooms by taking over the
11 necessary equipment.

12 We demonstrate this in our inaccessibility
13 procedure. We also demonstrate this in a response to the
14 Commission which they asked us to do a task manpower
15 analysis postulating the burn up of the cable spreading
16 room, postulating the burn up of the control room and
17 postulating the burn-up of the Ox building and still shut
18 the plant down. We have done this and it is documented.

19 MR. EBERSOLE: I see. Then you have a
20 conservative interpretation of GDC-19 I take it, and you
21 have remove shutdown capability which is independent of the
22 condition of the control room spreading out?

23 MR. PATRISSI: We have an alternate shut-down
24 method to being the plant to shutdown.

25 MR. EBERSOLE: Then it does not emanate from

1 terminal boards in the spreading room or the control room.

2 MR. BENDER: I think we have your message.

3 (Laughter.)

4 MR. BENDER: Mr. Sawyer, do you have one comment?

5 MR. SAWYER: I was going to respond to the same
6 question.

7 MR. BENDER: Go ahead.

8 MR. SAWYER: Basically I can say yes for our
9 three operating plants we know and our fire brigade knows if
10 a specific piece of equipment has to be protected or they
11 know that train "A" runs through one side of the room and
12 train "B" runs through the other side.

13 MR. EBERSOLE: So they discriminate.

14 MR. SAWYER: So they know that, yes, if there is
15 a bad fire and you spray there you are give us a problem
16 with both trains. So you had better decide that you are
17 going to use your alternate method of shutdown and call the
18 control room and say get going and do it while we take care
19 of the fire.

20 MR. BENDER: Thank you.

21 Gentlemen, you have been very helpful. What we
22 have been trying to do of course in asking questions is to
23 see if we could develop more understanding for ourselves and
24 at the same time give people an opportunity to say what they
25 were concerned about.

1 We are planning to have a short discussion here
2 just to see what we should discuss to the full committee.
3 As most people know, the Commissioners have asked through
4 the staff of the ACRS to express an opinion about the fire
5 protection rule. We are not making the rule and we do not
6 have the final say about what happens. The Commissioners
7 are going to decide.

8 It is the interest of the full committee to be
9 sure that when the Regulatory Commission puts out a rule it
10 is for the purpose of improving public safety. We are not
11 all that concerned about putting out rules to keep the
12 lawyers working. I think some of you are concerned about
13 whether the lawyers would plan their mission in life as one
14 of shutting down plants that don't comply with the rule. I
15 doubt very seriously that the Commissioners are all that
16 interested in putting out the rule, but I am sure we will
17 try to take account of those concerns about the rule itself.

18 Let me ask, if I can, whether the subcommittee
19 members have any further questions of the people that are
20 here in the room.

21 Jerry, do you have any?

22 MR. RAY: I have no further questions.

23 MR. BENDER: Then let me make a couple of points
24 if I can. Prior to this meeting I made available to the
25 subcommittee members some thoughts that I had about the

1 approach to this rule. As you know, I have never been a
2 strong supporter of even the regulatory guides, not because
3 I am opposed to regulatory guides but because I think when
4 you put something out it ought to be definitive enough so
5 somebody could read it and understand exactly what was
6 intended. If the guide could do that I would withdraw my
7 objection.

8 This rule has some of the same problems with it.
9 In many cases it is a fairly arbitrary judgement and seems
10 to be being put out to cut off the date. I think that we
11 have some obligation to try and express to the committee
12 whether we think that is a good idea or not.

13 Jessie.

14 MR. EBERSOLE: I look upon the rule really as
15 just an impasse breaker. I don't think that I could
16 subscribe to the rule in the absence of a detailed
17 consideration of the real important issues on which we are
18 trying to break an impasse. I don't have that in front of
19 me.

20 MR. BENDER: Do I interpret that as saying
21 without it you wouldn't recommend it?

22 MR. EBERSOLE: I would not. I would like to see
23 these crucial issues, just in fact what they are, on
24 that basis then determine whether the impasse should be
25 broken by the rule.

1 MR. BENDER: Jerry.

2 MR. RAY: My reaction is that rather than a rule
3 a change in the BTP or, if you will, a second position that
4 would apply to a restricted group of plans since the BTP is
5 definitely going to apply to future plans. As it exists now
6 a change or a revision in the BTP or a new second position
7 applying to the existing plans might very well be enough.
8 It won't have the impact perhaps. It is not a legal club
9 that is going to force the utilities to their knees and
10 require they explicitly conform with what the staff
11 requires. In that sense the rule does apply whereas the BTP
12 may not. You still have some discussion. But I concur with
13 Jessie that evidently the need here is for something that is
14 going to break an impasse and I can't understand why
15 something equivalent to a Branch Technical Position wouldn't
16 do that.

17 MR. EBERSOLE: Beyond that the rule contains
18 elements of the specification of auxiliary shutdown systems
19 or dedicated shutdown systems. I think these are in short
20 inadequate. For instance, they permit single-channel
21 shutdown and a variety of other things which are less than
22 complete if one were considering a dedicated shutdown system.

23 I would like to see industry be released to
24 improve emergency shutdown capability by dedicated or remote
25 shutdown systems and be relieved from adherence to some of

1 these complex fire protection criteria in so doing, but I
2 don't see any room for that in the rule.

3 MR. RAY: I have two more comments I would like
4 to make. One, I think I, myself, and I would recommend that
5 the committee take the position that would support the
6 staff's expressions to the Commission, the concurring
7 expression to the Commission that this rule, if it is
8 decided ultimately that there be a rule, will not rescind
9 previous agreements that will force the utilities into
10 scraping heavy investments and making additional investments
11 on top of those. I think that definitely would not be
12 right. For that reason and for the fact that it would
13 definitely reduce the future confidence on the part of the
14 industry in any agreements that are made with the staff.

15 Secondly, I don't think that the review period
16 has been adequate at all and that it should be extended.

17 MR. BENDER: Well, I will have the last word just
18 I am the subcommittee chairman and not for any other
19 reason. What I will try to do is take this initial draft
20 and restructure it somewhat.

21 MR. RAY: I will be glad to dig into it myself.

22 MR. BENDER: I would appreciate it if you would,
23 and if both of you would do the same.

24 As you know, I attached to this some suggested
25 criteria that might be useful as part of a rule. I don't

1 even believe those things necessarily belong in a rule, but
2 it is convenient to have criteria somewhere, and at the
3 moment the Branch Technical Position has criteria in it but
4 they are not set forth so much as criteria but as sort of a
5 little quote here and there from the study of the Browns
6 Ferry fire and what you learned from it and things like
7 that.

8 I guess my own view has been for a long time that
9 people ought to sit down and put those requirements in one
10 place and say these are the requirements for fire protection
11 and then develop some kind of a technical document that
12 shows are those fire protection criteria are met.

13 I think what we have right now is some fairly
14 considered judgments in the Branch Technical Position that
15 by and large are good but they may not fit every case. I am
16 sympathetic to using outside fire protection agencies as
17 part of the fire protection team if I know they are there.
18 They are far better than relying on a couple of guards, I
19 don't care how well you train them, if they are well-trained
20 people.

21 So far the Regulatory staff has not chosen to
22 deal with the total resource. It is fairly clear from TMI
23 that there is a need to deal with total resources in some
24 events and fires may be one of them. The difference between
25 a three-man team and a five-man team is not a big number in

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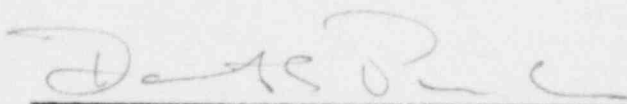
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Mary C. Simons

Official Reporter (Typed)

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Official Reporter (Signature)