

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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BRIEFING ON STATUS OF 10 CFR 50.59 ISSUES

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Room 1F-16  
Nuclear Regulatory Commission  
White Flint Building 1  
11555 Rockville Pike  
Rockville, Maryland

Tuesday, March 2, 1999

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The Commission met in open session, pursuant to notice, at 2:07 p.m., the Honorable SHIRLEY A. JACKSON, Chairman of the Commission, presiding.

MEMBERS PRESENT:

- SHIRLEY A. JACKSON, Chairman
- EDWARD McGAFFIGAN, JR., Commissioner
- NILS J. DIAZ, Commissioner
- GRETA J. DICUS, Commissioner
- JEFFREY S. MERRIFIELD, Commissioner

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STAFF PRESENT:

- ANNETTE L. VIETTI-COOK, Secretary
- KAREN D. CYR, General Counsel

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P R O C E E D I N G S

[2:07 p.m.]

CHAIRMAN JACKSON: Good afternoon.

I'm pleased to welcome members of the NRC staff and representatives of the Nuclear Energy Institute to today's meeting.

The subject of the meeting is a draft revision to

8 the NRC regulations for changes, tests, and experiments.  
9 The draft revision is described in SECY 99-054. This paper  
10 was submitted to the Commission last week and promptly was  
11 made available to the public.

12 I note that the staff intends to discuss the  
13 background for this rule-making effort, as well as providing  
14 a quick synopsis of the contents of 99-054.

15 The regulations for change, tests, and experiments  
16 such as 10 CFR 50.59 and 72.48 are a vital aspect of our  
17 regulatory structure, because they're intended to allow  
18 licensees a reasonable measure of flexibility in making  
19 changes to their facilities.

20 Of course, any changes made under this blanket  
21 must clearly be consistent with the continued assurance of  
22 protection of public health and safety.

23 The controlling regulations also be inspectable  
24 and enforceable. This allows the NRC to deal with isolated  
25 performance problems directly without creating unnecessary

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1 burden for good performers.

2 The Commission has directed the staff to work with  
3 the nuclear industry in creating revised rule language  
4 that's both appropriate and reasonable.

5 At this point, the vision provided by the  
6 Commission needs to be translated into regulatory language  
7 that assures predictable and appropriate real world results.

8 Therefore, I request that today's presenters  
9 address the practical effects of the proposed rule-making  
10 language.

11 Effects should be discussed in terms both of  
12 minimizing unnecessary burdens on licensees and on assuring  
13 adequate protection of public health and safety, but since  
14 we're a regulatory agency, I'll repeat the sentence this  
15 way.

16 Effects should be discussed both in terms of  
17 assuring adequate protection of public health and safety and  
18 of minimizing unnecessary burdens on licensees.

19 Effects also should be discussed in terms of how  
20 inspection and enforcement efforts would be impacted by the  
21 rule language.

22 Specific real world examples to illustrate these  
23 effects would be useful to the Commission, and the  
24 Commission looks forward to the presentation by the staff  
25 and the Nuclear Energy Institute.

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1 I understand that copies of the presentation are  
2 available at the entrances to the meeting.

3 So, unless my colleagues have any opening  
4 comments, Dr. Travers, would you begin?

5 DR. TRAVERS: Thank you, Chairman, and good  
6 afternoon.

7 The staff has, as you've indicated, been  
8 continuing to work with our stakeholders and has made, we  
9 believe, considerable progress in developing mutually  
10 agreeable resolutions for many of the issues associated with  
11 evaluating changes, tests, and experiments at facilities.

12 However, there are areas where differences remain,  
13 and I'm sure you're going to get the benefit of some of the  
14 discussion on those issues today.

15 The paper, as you have indicated, recently  
16 forwarded to the Commission contains a draft final rule  
17 which includes the staff's recommended approach for

18 resolving a number of difficult policy issues.

19 We are seeking Commission guidance on these  
20 recommendations before we prepare and submit to the  
21 Commission a final rule-making package for 50.59.

22 With me at the table today are Sam Collins,  
23 Director of the Office of Nuclear Reactor Regulation; Dave  
24 Matthews, Director of the Division of Regulatory Improvement  
25 Programs, NRR; Eileen McKenna from the Office of Nuclear

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1 Reactor Regulation; and Marty Virgilio, who is the Deputy  
2 Director of the Office of Nuclear Material Safety and  
3 Safeguards.

4 With that, we'd like to begin the presentation,  
5 and Dave Matthews is going to start us off.

6 MR. MATTHEWS: Thank you, Bill.

7 The staff had indicated on slide one that they  
8 would go over background associated with this rule-making,  
9 but in reviewing prior opportunities to discuss this rule  
10 with all of you, I realized that there probably is not a lot  
11 of benefit in going into any detailed background.

12 On January 13, 1999, the staff briefed the  
13 Commission on reactor licensing initiatives, but a big  
14 portion of that briefing was dedicated to where we were in  
15 the process of reviewing comments on the proposed 50.59 that  
16 had been issued in October.

17 That comment period closed on December 21st, so we  
18 weren't able to give you a complete recitation of the  
19 comments and our reaction to them, but I believe at that  
20 time we indicated that we were well along and I gave a  
21 snapshot of where we saw the comments coming out and where  
22 the staff was reacting, at least from an initial standpoint.

23 As was promised in our December 21st memo to the  
24 Commission, in mid-February we provided SECY 99-054, and as  
25 opposed to a final rule-making, it was a -- the result of

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1 the staff review of comments.

2 We indicated we would provide you recommendations  
3 for consideration before we moved to, as I used the word,  
4 galvanize a final rule for your consideration.

5 We think SECY 99-054 met those commitments. We  
6 even did attach proposed rule language so you could see the  
7 effect of our reaction to public comments on our proposals.

8 Eileen McKenna is going to lead the briefing  
9 today, and it is going to move very quickly into the  
10 substantive issues that remain on the table as far as the  
11 staff is concerned.

12 I'd like to make an assessment that I think  
13 convergence is at hand. I will not claim that it is there.  
14 The paper was released shortly after you received it.

15 We have had some preliminary discussion with NEI,  
16 and I think there still is a separation of views in some  
17 areas, but as the chairman and I discussed the last time we  
18 were before you, the time is upon us, I think, to make some  
19 decisions to move forward and bring this to closure, and I  
20 think my basis for saying that is that it's my view that  
21 this rule, as the chairman mentioned in her opening remarks,  
22 is a very pervasive rule, and that's my word.

23 Its practical impacts is that it spreads  
24 throughout the licensee organization, from engineering  
25 through operations, through maintenance. We see that

1 procedure that is usually developed reflected at just about  
2 every desk at a site.

3 So, I think it's pervasive. As such, I think it  
4 does impose some limits and restrictions on licensee  
5 activities, and I think clarity in this regard is needed, as  
6 proven by some of the disputes and debates we've had over  
7 issues over the last two or three years.

8 So, I say that by way of supporting a view that I  
9 think, to the extent we have not converged completely, I  
10 think the Commission has the opportunity to drive us to that  
11 convergence, and I think there's benefit in doing that.

12 CHAIRMAN JACKSON: Let me make sure I understand  
13 what you're saying. You're saying that you think it's now  
14 time for the Commission to settle the deltas as opposed to  
15 saying staff go back one more time?

16 MR. MATTHEWS: That's exactly what I'm saying.

17 CHAIRMAN JACKSON: I see.

18 MR. MATTHEWS: Not that we wouldn't be willing to  
19 continue to work, if you thought there was benefit of us  
20 doing that, to bringing some of these disparate issues  
21 closer together, but we've been at that for some time now,  
22 and I think there is a point of diminishing returns.

23 COMMISSIONER DIAZ: Would you define the  
24 convergence for me? Is it convergence with the original,  
25 you know, SRM of the -- the Commission put out or

1 convergence between who and what and how? What do you mean  
2 by convergence?

3 MR. MATTHEWS: I would put it as basically three  
4 -- the converging of three points, which is difficult to  
5 achieve sometimes --

6 COMMISSIONER DIAZ: I understand. I just want to  
7 make sure.

8 MR. MATTHEWS: -- with the Commission policy in  
9 terms of the direction that they would like the regulation  
10 and thereby the industry and the staff to go along with the  
11 views of the staff as to how that ought to be implemented  
12 and its workability and the views of the industry on its  
13 practicality.

14 So, I think those are the three elements that need  
15 to be brought together, and I would view it as attempting to  
16 achieve mutual agreement, that there is a workable solution  
17 and that there's benefit to moving forward with that  
18 workable solution, without maybe either or any of those  
19 parties having achieved the maximum benefit they'd hoped out  
20 of the process. I think there's benefit in getting  
21 agreement among them.

22 CHAIRMAN JACKSON: Okay.

23 MS. McKENNA: Okay. Thank you.

24 Could I have slide three, please?

25 On this slide, we listed the major contents of the

1 paper that we sent you -- that is, the policy issues -- and  
2 the terminology I used is kind of what we used in the  
3 proposed rule.

4 In some cases, the language may shift a little  
5 bit, but we listed here minimal increase in probability,  
6 margin of safety implications, because you know, we may not  
7 choose to continue to use that language in the future, part  
8 71 and part 72 issues that are related to 50.59 issues, some  
9 discussion of implementation schedules and enforcement

10 strategy, and we also had the commitment to respond with a  
11 recommendation on the scope of 50.59 which we did include in  
12 the paper.

13 As Mr. Matthews mentioned, the paper also had  
14 draft rule language that reflects these recommendations that  
15 we've made and I think a fairly detailed discussion of the  
16 comments that we've received so you could see what the views  
17 of those outside the NRC were, and we listed in a further  
18 attachment some additional issues that we thought were of  
19 interest but didn't rise to the level, we thought, of being  
20 in the main paper.

21 Could I have the next slide, please?

22 The proposed rule offered a standard of no more  
23 than a minimal increase in probability of accidents  
24 previously evaluated or malfunctions of equipment previously  
25 evaluated, and the commenters were reacting to some of the

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1 discussion we had in the Federal Register notice of how that  
2 would be implemented and suggested that, in that area of  
3 probability, that they would believe that qualitative  
4 assessments should be -- continue to be allowed and, in  
5 fact, that would be the way that people would approach these  
6 issues, and therefore, the guidance that we were able to  
7 develop was really more consistent with what we might  
8 characterize as a negligible standard, that you know, it's  
9 -- not really sure whether or not there's a change or not,  
10 as opposed to minimal, which has been suggested as being  
11 somewhat larger than negligible.

12 If we were to try to push to a minimal increase in  
13 probability standard, we felt that would require  
14 significantly more effort to develop to span the full range  
15 of kinds of accidents, the kinds of facilities, the kinds of  
16 equipment that are involved, because we do have operating  
17 reactors, reactors decommissioning, non-power reactors, and  
18 part 72 facilities, and therefore, trying to develop  
19 guidance on what minimal would be in all these contexts  
20 would be difficult.

21 CHAIRMAN JACKSON: As I understand, Eileen, in the  
22 SECY paper, that you would intend to treat minimal increases  
23 in probability significantly differently than you would  
24 treat minimal increases in consequence.

25 MS. McKENNA: That's correct. I think we felt

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1 that, in the area of consequences, there is a better basis  
2 for quantitative assessment of those, because you do have  
3 calculations that are done, whereas in the area of what's  
4 been called probability, the information in the FSAR now is  
5 generally qualitative, and to try to judge whether there was  
6 change in the probability resulting from the particular  
7 facility change, you know, could be very difficult to try to  
8 determine.

9 CHAIRMAN JACKSON: If you're going to use one word  
10 but treat it very differently vis a vis "probability" vice  
11 "consequences," is that consistent with the principle of  
12 good regulation, of clarity, and if you really mean  
13 negligible in one case and minimal in another, why wouldn't  
14 you just say so?

15 MS. McKENNA: We considered, certainly, the use of  
16 the word "negligible." I think they're both somewhat  
17 subjective terms.

18 Certainly, we understand it was kind of a --

19 somewhat of a dilemma of saying that you use the same words,  
20 have different meanings or use different words and whether  
21 that's more confusing.

22 I don't think we have a strong view that "minimal"  
23 is a better word than "negligible."

24 MR. MATTHEWS: I should add that "negligible" was  
25 the staff's -- excuse me. I'll just add that "negligible"

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1 was the staff's original proposed language because of some  
2 of those problems. So, to some extent, we've gone full  
3 circle in our thinking in that regard.

4 COMMISSIONER MERRIFIELD: It seems to me the  
5 salient point, though, is hasn't NEI basically said that,  
6 irrespective of whether we use "minimal," that they don't  
7 intend to change their guidance as it relates to  
8 "negligible"?

9 MS. McKENNA: Yes, I think that's true. There was  
10 some suggestion that, in the longer term, there might be,  
11 you know, willingness to work to develop something that  
12 might move us more towards "minimal."

13 I think the question maybe is whether that's where  
14 we want to spend the effort or whether -- you know, to look  
15 at other kinds of changes to the rule in the longer term  
16 rather than trying to bridge the gap between negligible and  
17 minimal increases in probability.

18 COMMISSIONER MERRIFIELD: The issue, then, is --  
19 we could go through the exercise of trying to establish what  
20 minimal is, but NEI has indicated no intention to adopt that  
21 since they want to stay with negligible.

22 So, it almost seems as if -- wouldn't we be going  
23 through an exercise that ultimately wouldn't prove fruitful  
24 for the industry?

25 MR. MATTHEWS: Under the current regulatory

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1 framework, I think I would draw that conclusion, that there  
2 isn't a lot of fruit to be borne by this effort at this  
3 point in time, and it's probably ripe to be revisited at  
4 such time as we come up with a 50.59 to conform to more  
5 risk-informed regulatory framework under the options that  
6 are under consideration for that purpose.

7 CHAIRMAN JACKSON: Karen, were you going to make a  
8 comment?

9 MS. CYR: Well, I was just going to say -- I mean  
10 I have -- again, we're not to the final phase of this at  
11 all, but I have an underlying concern here that I would --  
12 that we would propose to include, first of all, a term  
13 within the same regulation in which we propose to have sort  
14 of drastically different meanings for them and also that we  
15 would propose to include a term "minimal" which we don't  
16 begin to be able to describe in even a qualitative sense  
17 what that means. I think there's some potential legal  
18 drawbacks from putting out a term out there that we do not  
19 --

20 MR. MATTHEWS: We agree.

21 MS. CYR: -- purport to try to define. I mean  
22 that's not to say we can't, but I mean I think we either  
23 have to decide --

24 MR. MATTHEWS: I think in the context of  
25 probability, we can define negligible, and NEI has --

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1 COMMISSIONER McGAFFIGAN: Tell me how you do that.

2 COMMISSIONER DIAZ: May I interrupt? Because I  
3 was going to remain quiet, but I can't. It's easy to work  
4 with negligible, because negligible could be so close to  
5 zero that you can say zero.

6 MR. MATTHEWS: Or is indeterminate.

7 COMMISSIONER DIAZ: Right. I mean zero is 10 to  
8 the minus infinity; negligible could be 10 to the minus  
9 infinity plus 1 or 10 to the minus infinity plus 2 or plus  
10 three. It doesn't matter. It's just there.

11 So, the net effect is essentially de facto zero,  
12 because it's so close that you cannot determine whether it's  
13 zero or not, and I believe that what the Commission intended  
14 was to get off from that level, that we wanted something  
15 that was within the margin of error of calculations, within  
16 what is the margin of error of measurements, something that  
17 is not zero, okay, because negligible is so close to zero as  
18 you want to make it, and so, if you can define negligible, I  
19 don't see how you cannot define minimal. I'm really lost.

20 MR. MATTHEWS: I think the issue is one, since  
21 we're focusing the discussion here, with regard to  
22 probabilities, okay, that the limitation is there given the  
23 fact that the qualitative description of accident likelihood  
24 that is contained in many of the FSARs doesn't lend itself  
25 to quantification.

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1 We have not gone through the process, for example,  
2 of articulating a probability or a likelihood associated  
3 with design basis events, but yet, those are many of the  
4 events that are being affected by the changes that might be  
5 proposed.

6 So, the application, while in theory you could  
7 apply the word "minimal" to a quantification of likelihood,  
8 that quantification doesn't exist in the FSAR.

9 COMMISSIONER DIAZ: So, in essence, you say, well,  
10 it has to be close to zero.

11 MR. MATTHEWS: If they can only deal with it  
12 qualitatively, I think, in essence, we're saying it has to  
13 be close to zero.

14 COMMISSIONER DIAZ: And I'm saying that, in real  
15 engineering life, if you cannot put a value on the  
16 probabilities on the original product, how can you put a  
17 value on the change, and so, you know, I mean you're dealing  
18 with semantics in here, and we're not dealing with  
19 semantics, we're dealing with real changes, okay, that  
20 actually should be allowed, because they are within the  
21 margin of error of any model, of any calculational  
22 technique, of any kind of measurement that you can perform,  
23 and those errors can be quantified, quote, "qualitatively  
24 quantified" as minimal, being in the range of the margin of  
25 error that exists in the original proposal of the design

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1 basis, in the original accident scenario, in whatever you  
2 do.

3 I mean who says that the error is zero, and who  
4 can say that, if we just improve the computer and go to  
5 double precision, we get a different result? It's a  
6 negligible result. It's a negligible change. But it's all  
7 within the margin of error.

8 And what I thought we were trying to do is get off  
9 from that area, which is so close to zero that anybody can  
10 say the -- you know, the change is zero. So, I really fail

11 to see what is the difficulty in defining minimum versus  
12 negligible.  
13 You can define negligible. Minimal is three  
14 orders of magnitude, four orders of magnitude larger than  
15 negligible. It's that simple. Five orders of magnitude.  
16 You know, it's two order -- something.  
17 CHAIRMAN JACKSON: Five orders of magnitude on 10  
18 to the minus infinity.  
19 COMMISSIONER DIAZ: That's right. I'm sorry.  
20 COMMISSIONER McGAFFIGAN: I'm not sure there was a  
21 question there, and there probably won't be a question in  
22 this either, but --  
23 CHAIRMAN JACKSON: We'll go down the line with  
24 testimony.  
25 COMMISSIONER McGAFFIGAN: You know, Commissioner

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1 Merrifield asked the question, it's the logical question  
2 that comes out of the way this paper is presented, you know,  
3 why did we make any effort to try to get to minimal, and so,  
4 just for the record, we thought that the negligible standard  
5 which NEI implements in 96-07, I think, is so small -- they  
6 don't use the word "negligible," they use the word "so  
7 small" and then they describe so small that, you know --  
8 that there had to be something more to that, and this was in  
9 the context of the risk-informed reg guides that we were  
10 looking at at the same time, and we had Gary Holahan and  
11 company saying, to get down to 10 to the minus 7 delta core  
12 damage frequency, you can't even find it, you know, and  
13 there even was, in one of the early view-graphs in Reg.  
14 Guide 1.174 and 1.177, that whole series, there was -- I  
15 think there was a negligible category --  
16 COMMISSIONER DIAZ: Yes.  
17 COMMISSIONER McGAFFIGAN: -- which is below 10 to  
18 the minus 7 core damage frequency and there was the "so  
19 small" category -- or "very small."  
20 COMMISSIONER DIAZ: Very small.  
21 COMMISSIONER McGAFFIGAN: We all decided very  
22 small is above minimal. Minimal was less than small,  
23 certainly less than significant, greater than negligible,  
24 and Gary Holahan -- and we just --  
25 CHAIRMAN JACKSON: Except that the real issue, it

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1 strikes me, has to do with less that -- and not that I'm,  
2 you know, trying to disagree, but rather, as the analyses  
3 are done relative to design basis accidents, can you do  
4 those kinds of calculations, which is different than what is  
5 essentially severe accident modeling when you talk about the  
6 use of reg guides --  
7 COMMISSIONER McGAFFIGAN: And I understand that.  
8 MR. MATTHEWS: For which we do have, you know,  
9 many plants have an understanding.  
10 COMMISSIONER McGAFFIGAN: I'm not sure what risk  
11 we run -- and you have proposed "minimal," to keep the word  
12 "minimal."  
13 I mean reg guides are reg guides. You know, we  
14 endorse a reg guide, you know, that NEI has that uses the  
15 words "so small" and they don't choose to change it, and we  
16 say that's certainly less than minimal and, indeed, probably  
17 negligible, but you can still, as a matter of rule, make  
18 changes that you believe result in minimal changes and  
19 likelihood if that, indeed, is something you feel you can  
20 justify, and we can't enforce against you if you make a

21 minimal change.  
22           You know, I'm probably showing my bias, but I'll  
23 probably stick with minimal even though you guys haven't  
24 been able to define the difference between negligible and  
25 minimal. Maybe practice will define the difference between

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1 negligible and minimal.  
2           MS. MCKENNA: I think where the real test comes  
3 goes back to the Chairman's comment about the practical  
4 effects, is that where you run into these questions of  
5 minimal, as you say, and a particular licensee says I've  
6 made this change and I consider that to be minimal, it's how  
7 is the inspector going to look at that and are they going to  
8 have the same view of the matter, and I think that's where  
9 some of the difficulty arises, is we are trying to have a  
10 rule and have to revise existing guidance for inspectors, as  
11 well, to kind of steer them as to when they should look at  
12 something and say, well, this looks like it's gone too far,  
13 it's more -- really has fallen beyond that minimal, and it's  
14 drawing what that line is that I think is giving us the  
15 problem.

16           COMMISSIONER MCGAFFIGAN: Well, I think we'll know  
17 it when we see it, to be honest with you.

18           CHAIRMAN JACKSON: That's the whole point, though,  
19 is the issue is how do you ensure some consistency vis a vis  
20 inspection and, you know, enforceability, not in the  
21 negative sense of the word but something that provides some  
22 clarity with respect to what you enforce against.

23           I mean I'm probably the neutral party here, but I  
24 honestly believe you have to understand that you have  
25 something that the staff can actually use.

21

1           COMMISSIONER MCGAFFIGAN: My problem with it is,  
2 as I understand it, this is not an area that's highly  
3 fruitful from an enforcement perspective, and if we do spend  
4 our time arguing with licensees as to whether a change which  
5 they dutifully report through the FSAR update process was  
6 more than minimal or met a minimal test, that may not be the  
7 highest and best use of our resource. If we argue about  
8 them whether it's more than negligible, it may be not the  
9 highest and most fruitful area for enforcement. So, I don't  
10 know.

11           CHAIRMAN JACKSON: Commissioner?

12           COMMISSIONER MERRIFIELD: Well, this discussion  
13 reminds me of a couple of examples. One of them was when I  
14 was working on Capitol Hill as a new young staffer -- and  
15 Commissioner McGaffigan may appreciate this.

16           I had a discussion with the Senate leg counsel,  
17 and the Senate leg counsel said, you know, the thing you  
18 need to remember about legislation is you can define the --  
19 Congress can define the moon as being made of green cheese,  
20 but that doesn't mean it's so, and from a practical  
21 perspective, I understand the comments made by Commissioner  
22 Diaz and Commissioner McGaffigan about trying to have a  
23 difference between negligible and minimal, and I applaud it,  
24 and I agree perhaps that's the direction we should think  
25 about going in the future, but from a practical consequence,

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1 if we have -- if we're making an effort to change something  
2 which is not going to be -- which the industry isn't going

3 to take advantage of, it does raise a question in my mind  
4 about pursuing that.

5 Secondly, unlike Commissioner McGaffigan, perhaps  
6 the attorney in me, I'm very uncomfortable about having  
7 non-defined terms. I don't think we should just, you know,  
8 lay out minimal there without having an ability of our  
9 inspectors to understand what the difference between that  
10 and negligible is.

11 I mean, you know, it's easy for us to say, well,  
12 it's sort of like pornography, you know it when you see it,  
13 but you know, our court system, with that particular  
14 example, has lots of court cases about what --

15 CHAIRMAN JACKSON: It wouldn't be a difference  
16 between minimal and negligible. It would be a difference  
17 between minimal and zero, because zero is the current  
18 standard, and the standard you'd be moving to would be  
19 minimal.

20 COMMISSIONER MCGAFFIGAN: But the standard --  
21 we're not defining negligible except we're letting NEI  
22 define it by saying it's so small and then whatever words  
23 that follow, and then we're saying -- if we put negligible  
24 back in, we're going to say, yep, NEI defined it well enough  
25 and if a licensee follows that, they'll be safe.

23

1 We're not defining the term "negligible" if we  
2 substitute negligible for minimal. We're letting NEI define  
3 it and saying that's good enough and we're getting a treaty.

4 If we put "minimal," NEI apparently isn't going to  
5 take the advantage of that and they're going to stick with  
6 their current guidance and most people will probably stay  
7 with that, but somebody might be brave enough someday to say  
8 no, there's more to it than this and here is an opportunity.

9 COMMISSIONER DIAZ: The fact is, if I might pounce  
10 on that, this is a very diverse industry, and you know, even  
11 if NEI adopts a position, that doesn't mean the utility is  
12 going to abide by the "negligible" term.

13 So, you know, playing devil's advocate, it could  
14 very well be that they decide that I'm going to risk it, I'm  
15 going to go into the minimal if we -- if the Commission  
16 allows that range.

17 COMMISSIONER MCGAFFIGAN: I think negligible is  
18 something more than "so small." I mean NEI has said it's so  
19 small. Negligible, according to Gary Holahan, was 10 the  
20 minus 7 core damage frequency.

21 CHAIRMAN JACKSON: But you keep talking about  
22 that. The core damage frequency, 10 to the minus 7, that is  
23 a different --

24 COMMISSIONER MCGAFFIGAN: That's a significant --

25 CHAIRMAN JACKSON: The point is we should have

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1 risk-informed 50.59 to start with. Then we would be using  
2 Reg. Guide 1.174.

3 But we decided we couldn't do that, we're going to  
4 stay in design basis space, and then you're going to sit and  
5 try to graft something onto a design basis rule that was  
6 developed in a completely different context, and it can  
7 sound nice, sitting here on a table in Washington, but when  
8 it really comes down to people who have to be out in the  
9 field, who in the end are the ones that carry out the  
10 regulatory program, you haven't gained anything, and that's  
11 not to say whether "minimal" should be the word or  
12 "negligible" should be the word.

13 The issue is whatever the word is has to be well  
14 enough defined that it can be consistently implemented in  
15 the field, and Reg. Guide 1.174 for the existing 50.59 is  
16 not going to save us, and so, that's my basic point. You  
17 may not like it, but it's a fact.

18 MS. McKENNA: Second bullet, while our own -- kept  
19 the word "minimal" in there, we did suggest a few other  
20 changes to the rule language, and I've listed them here.

21 I think partly as a result of our discussions with  
22 ACRS and others who were asking, you know, probability, you  
23 know, what does that really mean in this context, we've  
24 decided that frequency of occurrence rather than probability  
25 of occurrence was really a more representative term of how

25

1 initiating events such as accidents in the FSAR are really  
2 considered and evaluated, and so, we thought that was a  
3 better word than "probability" in that instance.

4 For malfunction of equipment, we really felt that  
5 likelihood of occurrence rather frequency was a better  
6 choice because you have different equipment that functions  
7 in different ways, some is on demand, some has an operating  
8 type of thing, and that frequency wasn't really the metric,  
9 if you will, of interest but more what's the chance of not  
10 performing the way you expect it to?

11 The last change that we suggested was to move from  
12 the language of equipment important to safety to the  
13 language of systems, structures, and components important to  
14 safety.

15 This really arose out of our review of the Part 72  
16 issues, where that is the terminology that is used, and in  
17 the interest of trying to make things as consistent as we  
18 could, that question arose as to whether Part 72 should say  
19 equipment or 50 should say systems, structures, and  
20 components.

21 Looking more broadly through both Part 50 and Part  
22 72, we really see that equipment is kind of the unusual  
23 occurrence of language, that SSC is much more common, and we  
24 felt that it would be appropriate to make it conform.

25 We didn't see that this would cause any difficulty

26

1 in implementation, because really, that's, you know --  
2 equipment and SSC really are fairly similar in their scope  
3 of what's included, and we just felt it would help us with  
4 the consistency of language but not cause us any other  
5 problems for implementation.

6 The next slide, please.

7 The title of this is "Margin of Safety." In other  
8 contexts, we've sometimes started referring to it as  
9 criteria seven, which in the -- breaking out the existing  
10 criteria into their individual statements puts this  
11 particular criteria s the seventh one in the list.

12 As you recall, in the notice, we solicited comment  
13 on a wide range of options from the option that the staff  
14 had initially offered in SECY 98-171, the option of deletion  
15 of margin as a separate criteria, and a whole set of options  
16 dealing with various results of analyses, whether they  
17 focused on a particular fission product, barrier responses,  
18 or particular system functions, we tried to give enough  
19 variability so that people could provide their views as to  
20 what was important and how it ought to be addressed.

21 We also spoke to different approaches about how

22 much change should be allowed, whether there should be  
23 essentially a zero change or approach to limits in some --  
24 whether negligible or directly to the limit approach.  
25 We also offered in the proposed rule -- we brought

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1 up the issue of controlled methods, as to whether there  
2 should be language in the role that specifically spoke to  
3 how you would control evaluation methods, whether you had  
4 language that said methods needed to be approved in some  
5 manner or you left that to other processes to control that,  
6 and in the comments, as you presumably saw, we got quite a  
7 range of views, and I've listed here in the slide the --  
8 noted the NEI proposal, since it did have support of a large  
9 percentage of the industry, as well, we wanted to give it  
10 full consideration, and so, we did look at this very  
11 carefully, we sent it out to our other offices and regions  
12 to get feedback on whether they thought this criteria would  
13 be suitable for the purpose in 50.59, and got a number of  
14 comments, and I think the primary comment we had was that  
15 people thought that, by the language here, the design basis  
16 limits, directly related to -- and I've summarized it here  
17 on the slide as fission product barrier integrity.

18 In their proposed language, they actually itemized  
19 fuel clad, system pressure boundary, and containment  
20 boundary as the proposed criteria, but many of our staff  
21 were concerned that the directly related to the barrier  
22 integrity, that that narrowed the set of information that  
23 would be controlled by this criteria too much and that  
24 certain things would fall through the cracks, if you will.

25 CHAIRMAN JACKSON: Let me ask you this. Are there

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1 examples of changes that would be allowed under the NEI  
2 guidance that wouldn't be allowed under your proposal?

3 MS. McKENNA: Part of it is a function of how you  
4 look at the whole set of the criteria and how this  
5 particular one would be implemented.

6 Depending on how they're implemented, it's  
7 possible that there would be no change, that our criteria  
8 and their criteria might get you to the same place, but it  
9 may not.

10 It kind of depends if you look at the directly  
11 related to a fission product barrier and say, well, the  
12 change I'm making is in this system over here, which doesn't  
13 relate to that, and you kind of leave the process before you  
14 get to the question that we've proposed be offered, which is  
15 the system functional capability.

16 I think it's been mentioned that other criteria  
17 might also be -- trip particular changes. Say it was a  
18 change to -- we've talked about things like battery systems  
19 or -- the way this is worded would not really arise if  
20 they're not directly related to the barrier integrity.

21 What else would capture it? Perhaps tech specs.  
22 Perhaps other criteria.

23 CHAIRMAN JACKSON: Well, I guess that was going to  
24 be my next question. Is your proposal consistent with the  
25 rest of our body of regulations -- for example, the general

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1 design criteria of Appendix A and tech specs, and is NEI's  
2 proposal consistent?

3 MS. McKENNA: I think they are both consistent.  
4 It's kind of a question of degree.

5 In order to reach to the barrier integrity, you  
6 have to go through, if you will a consideration of are your  
7 systems performing in the way you expect them, but it's that  
8 level of detail or rigor, perhaps, of the analysis that is  
9 really what's at issue.

10 I think the body of the regulations do focus on  
11 fission product barriers, they do focus on design basis,  
12 they focus on the systems that provide these functions.

13 So, I think, in that sense, both approaches are  
14 consistent with the regulations. It's really how far down  
15 you want to go.

16 COMMISSIONER DIAZ: If I may, I'm going to use  
17 something the Chairman said regarding the importance of  
18 definition, and you look at this modification by the staff,  
19 you know, and you look at -- as well as support functions,  
20 and I found that very undefined.

21 I mean if you come and tell me these are, you  
22 know, safety significant support functions or these are  
23 risk-significant support functions or you will bound support  
24 functions, okay -- because you know, support function could  
25 go all the way to supporting bodily functions, and we're not

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1 into that business, and so, you know, again, is, you know,  
2 the issue of definition, okay, so that we can actually put  
3 them in terms that people can work with them, and support  
4 functions is undefined.

5 I mean, you know, support functions of protecting  
6 the barriers?

7 So, again, you know, I find a little bit of a lack  
8 of contact in here, and first, we want to define something,  
9 and then we are defining -- and then we add something that  
10 broadens the scope enormously, and I cannot understand why.

11 MS. MCKENNA: Okay. I think the intention with  
12 the support functions, if I could speak to that point, was  
13 it's those functions -- when you're talking about the  
14 systems that directly protect the barriers, and those would  
15 be your mitigation systems and protection systems, that kind  
16 of thing, and that in order for those systems to perform,  
17 they may need cooling water, they may need electrical power,  
18 they may need air, these kinds of things, and that those are  
19 the support functions that are necessary for those systems  
20 that perform that.

21 COMMISSIONER DIAZ: But it doesn't say so, and  
22 that's precisely what the point is. It doesn't say so. It  
23 needs to be narrowed down.

24 MS. MCKENNA: We mentioned we were kind of working  
25 up to the wire to try to get agreement within the staff on

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1 an approach and were perhaps not able to fully amplify how  
2 --

3 COMMISSIONER DIAZ: But that's your intent.

4 MS. MCKENNA: Yes.

5 MR. MATTHEWS: That's our intent, and we are  
6 working within the ambit of the PSAR and the design basis.  
7 So, it isn't an unlimited list.

8 COMMISSIONER MCGAFFIGAN: Madam Chairman, this  
9 bears on a question you asked, but I think we need something  
10 more from the staff on this issue than broad sentences such  
11 as the staff was concerned with the language --

12 CHAIRMAN JACKSON: What page are you working off  
13 of?

14 COMMISSIONER MCGAFFIGAN: I'm on page 5. The  
15 staff was concerned that language, quote, "directly related  
16 to fission product barrier integrity" might be too narrow.  
17 I mean I think you're going to have to define how your  
18 broadening helps us and what it gets for us and why that's  
19 important to us.

20 I have the same concern as Commissioner Diaz about  
21 this phrase that shows up in the rule or any system  
22 necessary to support the functions of these SSC, because I  
23 mean you may -- you know, it's a very broad phrase, unless  
24 you have some agreement as to what it means.

25 I also don't totally understand the margin of

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1 safety, fission barrier criteria now when it talks about the  
2 result in the design basis capability being exceeded or  
3 altered.

4 If it moves in the right direction, I mean if they  
5 make a change and it's going to make a fission product  
6 barrier better, why do they have to come in and ask for our  
7 permission to do that?

8 If it's clearly -- we're not talking negligible,  
9 we're not even talking positive in bad space. We're talking  
10 negative in bad space. It's good. Why do they have to come  
11 in and get a change?

12 MR. MATTHEWS: If it's a design basis capability,  
13 it has some importance in our regulatory structure with  
14 regard to the review that was afforded it at the time that  
15 we initially licensed the plant.

16 So, if it's truly a design basis capability, then  
17 it's an important parameter.

18 So, the alteration of that parameter and the  
19 methods for calculating the direction that it moved in are  
20 important, and I think, if it's truly a design basis  
21 capability or limit, the staff wants to be involved in that  
22 reconsideration of moving it.

23 MR. MATTHEWS: Even if it's wildly positive, and  
24 they're going to report it in their FSAR update pursuant to  
25 10 CFR whatever.

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1 We rarely see wildly positive changes being  
2 desired in design.

3 COMMISSIONER MCGAFFIGAN: I understand the being  
4 exceeded. It's being altered that's giving me --

5 MR. MATTHEWS: And I think the altered is --

6 COMMISSIONER MCGAFFIGAN: You might as well say  
7 being exceeded or changes in any way. I mean it really is  
8 being altered, because you don't need both.

9 MR. MATTHEWS: Well, it depends -- if you're  
10 really at a design basis limit that has importance with  
11 regard to safety, how you choose to decide that it can be  
12 altered is a critical part of the decision of the  
13 acceptability of which way it moved.

14 I'll give you an example.

15 In NEI, in their proposal, just looking at fission  
16 product barrier performance, they were the ones who even  
17 came up with the term "or altered" by virtue of the fact  
18 that, when they look at something like fuel cladding and  
19 certain performance parameters there, there isn't any  
20 margin. It's very close to the limit.

21 COMMISSIONER MERRIFIELD: I think what  
22 Commissioner McGaffigan is alluding to, though, is "or  
23 altered" subsumes "exceeded." We can cross out "exceeded

24 or" and it's the same result.

25 MR. MATTHEWS: You could do that, I think.

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1 COMMISSIONER MCGAFFIGAN: In terms of English, if  
2 you and NEI agree --

3 MR. MATTHEWS: I was reacting more to thinking you  
4 were concerned that we were being too restricted by saying  
5 --

6 COMMISSIONER MCGAFFIGAN: Well, I was.

7 MR. MATTHEWS: -- altered.

8 COMMISSIONER MCGAFFIGAN: I was trying to follow  
9 the logic of the English. I mean if you and NEI enter an  
10 agreement that any change in this area is so fundamental  
11 that it has to be reviewed -- I see Tony shaking his head --  
12 then --

13 MR. MATTHEWS: Then altered would be sufficient  
14 terminology as opposed to exceed.

15 COMMISSIONER MCGAFFIGAN: -- altered is  
16 sufficient, because exceeded is subsumed, as Commissioner  
17 Merrifield said, as a matter of English, as a matter of  
18 physics.

19 CHAIRMAN JACKSON: Right. But presumably, these  
20 are the kinds of things that can be -- I mean I hope we're  
21 not going to sit here and --

22 COMMISSIONER MCGAFFIGAN: No, but it's important  
23 to understand them.

24 CHAIRMAN JACKSON: Mr. Matthews, would you like to  
25 -- I mean Ms. McKenna.

35

1 MS. MCKENNA: Yes. Okay. Let me pick back up.

2 We've been talking about the NEI proposal and why  
3 the staff chose to take a somewhat different approach to  
4 this. I think I mentioned the concern on the "directly  
5 related" may not include certain information that may not  
6 protect the integrity of the design.

7 So, staff tried to take the -- some of the essence  
8 of the NEI approach.

9 I think the idea of focusing on the design basis,  
10 looking at protection of the barriers as very solid concepts  
11 that are consistent with our regulatory process, and try to  
12 address where we thought there might possibly be some gaps,  
13 and that was by taking it to the system functional level  
14 rather than at the barrier response level itself, and then  
15 part of that was, I think, was a recognition that we see in  
16 tech spec space, is that, you know, to say a system that  
17 provides -- that has a function to protect a barrier will  
18 not function unless those other systems that are necessary  
19 for it are also functioning.

20 So, that was the reason for including the language  
21 about support functions, is really -- I would agree that we  
22 may able to tighten that in -- to be clear that it is -- and  
23 I think we tried to do it by saying those that support the  
24 --

25 CHAIRMAN JACKSON: If it's a safety-related piece

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1 of equipment, then you need that system to operate, but --

2 DR. TRAVERS: And we have a lot of experience in  
3 that in the context of tech specs and the supporting  
4 functions that cascade from the principle system at issue.

5 MS. MCKENNA: Yes, that's correct.

6 COMMISSIONER DIAZ: And of course, when you did  
7 this, you considered the fact that the majority of  
8 commenters did favor deletion of the margin of safety  
9 criteria in favor of just having it subsumed by the tech  
10 specs, which is the basis for where all of these margins of  
11 safety are, but your paper doesn't discuss that.

12 It includes it in the end, but you did not  
13 consider that as an option.

14 MS. McKENNA: We did not consider it as an option,  
15 because we were not convinced that the other criteria and  
16 the tech specs were sufficiently comprehensive for all of  
17 the facilities that we could delete it.

18 There is a range, obviously, of what's in tech  
19 specs from plant to plant, and certainly, if you look at the  
20 statement here about the design basis capabilities, system  
21 functional requirements, some of that information,  
22 presumably for the more important systems, is going to be in  
23 the tech specs, but it may not be complete.

24 So, we were looking to make sure, through this  
25 criteria, we would capture anything that was not complete in

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1 the tech specs.

2 The tech specs are already, obviously, a criteria  
3 that would immediately require the review, and if that was  
4 the case, then you would never -- a licensee would never  
5 have to look at these questions.

6 The first test they usually have is is it a tech  
7 spec change, and if the answer is yes, you kind of go  
8 immediately --

9 COMMISSIONER DIAZ: It's demanding more of the  
10 good because of the bad?

11 MS. McKENNA: I don't know as it requires more.  
12 As I said, I think in practice, people look at the tech spec  
13 question first. It's kind of straightforward, probably, to  
14 tackle, and if it's in the tech specs, you know, there you  
15 are. You don't have to go try to answer this question.

16 So, it would only be those plants that it was not  
17 in the tech specs that you might get here to try to answer  
18 is there --

19 COMMISSIONER DIAZ: Another interesting point --  
20 will that be clear if it's in the tech spec space, you don't  
21 need to argue the margin of safety?

22 MS. McKENNA: I think that's pretty clear.

23 CHAIRMAN JACKSON: But there's variability, is  
24 what you're saying, with respect to how comprehensive the  
25 tech specs are?

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1 MS. McKENNA: It was variability as to whether a  
2 particular change at a licensee would affect a tech spec or  
3 not, because they don't all have the same tech specs.

4 COMMISSIONER DIAZ: That was not clear to me, but  
5 if it's clear, then obviously it's good.

6 MS. McKENNA: Yes. I think the paper presented  
7 the language that we had offered as the criteria seven.

8 I think we've kind of talked about most aspects of  
9 it, and I won't dwell on that unless there are additional  
10 comments that -- I think we've gotten some sense from the  
11 Commission of where some of the questions are on this  
12 particular item.

13 MR. MATTHEWS: I might just stop you for a moment

14 --

15 MS. McKENNA: Sure.

16 MR. MATTHEWS: -- and go to the actual proposed  
17 wording of the rule.  
18 MS. McKENNA: It's also in the paper, on page 5.  
19 MR. MATTHEWS: Yes, it's on page 5.  
20 The first test is whether -- in terms of whether a  
21 change test or experiment is allowed as to whether or not,  
22 to make that change, you would have to make a change to the  
23 tech specs, in which case if you needed to change the tech  
24 specs, you couldn't make it under 50.59.  
25 But I mean that's clearly stated there as the

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1 first stop.  
2 COMMISSIONER DIAZ: It is an additional  
3 requirement rather than a release from requirement.  
4 MR. MATTHEWS: It's an additional limitation.  
5 COMMISSIONER DIAZ: That's right.  
6 MS. McKENNA: Okay.  
7 I think we're onto the next slide now.  
8 I alluded to this, although we may not have stated  
9 it quite this way, but criteria for review under this  
10 statement is whether the design basis capability has been  
11 exceeded, and we would expect that, while we refer to the  
12 systems, structures, and components, we believe that, in  
13 general, it would be system functional level that would be  
14 what you would look at, rather than component, because you  
15 don't usually have particular functions that are unique to  
16 components, they usually are a matter of how the system  
17 functions.  
18 The next bullet is what we've included in here as  
19 criteria eight as a question of control of evaluation  
20 methods, and this really arose from our approaches on  
21 providing the definitions of what's changed at the facility  
22 are as described, is saying that that includes the  
23 information in the FSAR that gives the analysis, that  
24 demonstrates how the requirements are met, and when you  
25 start looking at changes to the methods and analyses

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1 themselves rather than changes to the facility, the criteria  
2 that are there don't always help you decide when, you know,  
3 you're making a change that really might require review.  
4 For example, if you're looking at a method that  
5 perhaps has removed conservatism or included some additional  
6 assumptions, if you say, well, how did that change my  
7 consequences or how did that affect the system capabilities,  
8 your analysis may predict you have better performance, and  
9 therefore, the criteria we have don't really help answer  
10 changes to methods themselves, and that was part of the  
11 rationale for saying we really need a different standard to  
12 deal with changes to evaluation methods.  
13 We had considered in the proposed rule saying  
14 basically that all methods had to be reviewed and approved.  
15 In this paper, we included a concept of minimal to  
16 try to deal with changes that -- you know, there may be a  
17 change as a result of going from rev three to rev four of  
18 some model, things of that nature, that if you just said,  
19 well, you know, if they were previously reviewed and  
20 approved, can't change them at all, we were looking to  
21 provide some degree of latitude on changes to methods but  
22 didn't want to just say make any changes you want, because  
23 we do feel that how you demonstrate that you satisfy the  
24 criteria is important.

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1 more than a minimal change in method?

2 MS. McKENNA: This is an area where -- I think  
3 probably the next bullet -- is we do feel we will need to  
4 give some guidance on that.

5 I think we were looking in terms of the degree of  
6 change in the result when you look at kind of the old method  
7 or the new method and look at your results, how much have  
8 they changed.

9 COMMISSIONER DIAZ: But going back to Commissioner  
10 McGaffigan's question, if you're using an improved method  
11 that give you a much higher, you know, level of confidence,  
12 even if the result is -- you know, might be more than  
13 minimal, better, is that not acceptable?

14 MS. McKENNA: I guess it goes back to the question  
15 of what you're doing -- the purpose of that analysis, and  
16 this gets into the issues of -- you know, that usually  
17 analysis changes are not done just for the purpose of doing  
18 a more refined analysis, there usually are other changes or  
19 issues that are prompting the change in methods, and I think  
20 the concern we've had is the use of changes and methods to  
21 perhaps mask the effects of other changes, that if you look  
22 at -- you know, if you make a change to method and make a  
23 change to your plant, you say, well, my answer -- you know,  
24 there's no change in my result, therefore everything's fine,  
25 but there was a change that was made that perhaps had some

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1 effective interest.

2 COMMISSIONER DIAZ: I think that's wonderful, but  
3 on the same token, in the same rule, you have to be able to  
4 allow for the positive change.

5 MS. McKENNA: Yes.

6 COMMISSIONER DIAZ: For the new method, for the  
7 new model, for the new, you know, calculation scheme that  
8 comes along, and you don't want to punish people because  
9 they now have a better method and they want to use it.

10 So, you know, there is that variability --

11 MS. McKENNA: Yes.

12 COMMISSIONER DIAZ: -- and that's where the word  
13 "minimal" comes in.

14 MS. McKENNA: Uh-huh.

15 COMMISSIONER DIAZ: Okay. Thank you.

16 COMMISSIONER MCGAFFIGAN: Are all the terms in  
17 this new criterion well-defined?

18 I mean I went back and looked back at your rule,  
19 and I know some of these terms, if you're only going to  
20 define them in the reg guide, that may prove to be  
21 problematic, because I'm not sure you and the industry have  
22 total agreement, not just on the word "minimal," but you  
23 know, you may -- method of analysis may be subject to  
24 interpretation, design basis values.

25 You guys are having a long discussion as to what

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1 design basis is.

2 So, there may be other problems in this criterion  
3 that are going to take some time. I'll be interested in  
4 NEI's comments later.

5 CHAIRMAN JACKSON: Maybe I should move that we  
6 just table doing the 50.59 rule-making. Want to vote on  
7 that now?

8 COMMISSIONER MCGAFFIGAN: Table doing it? Just  
9 quit?  
10 CHAIRMAN JACKSON: Yes, just quit.  
11 COMMISSIONER MCGAFFIGAN: Do we endorse NEI 96-07  
12 as part of it?  
13 CHAIRMAN JACKSON: Just quit. It will iterate  
14 forever. No takers. Okay. Well, then remember what Mr.  
15 Matthews told us at the beginning.  
16 MR. COLLINS: I think, just as a general comment,  
17 I think we can make this so hard that you can't get to the  
18 point where we all realize that the agency and the industry  
19 needs to provide for maintaining safety, reducing  
20 unnecessary burden. It's a matter of degree, and it's a  
21 matter of how much detail do we need at this particular  
22 point in time.  
23 MS. CYR: But at the same time, you have to have  
24 the sufficient information in the regulation that you have,  
25 in fact, given adequate notice to the parties about what it

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1 is that you as a regulator are propounding as a rule. I  
2 mean I think there has to be enough definition.  
3 COMMISSIONER MCGAFFIGAN: Was this criterion, this  
4 new criterion, which I guess you say is a subpart of the old  
5 margin of safety criterion, noticed that we might have a  
6 criterion on methods in our final rule?  
7 MS. MCKENNA: Yes, we did. In the proposed rule,  
8 in the section on margin, we broke it into kind of three  
9 pieces.  
10 The first part had to do with kind of what  
11 parameters or information would be included in it. The  
12 second was how much it might change, and the third was  
13 whether there would be language on evaluation methods.  
14 MR. COLLINS: Chairman, on your previous point, I  
15 think I'm a little risk going down this road, but there is  
16 -- looking at the opportunity to, as you mentioned,  
17 risk-inform part 50, which opens up other doors, depending  
18 on the Commission's direction to the staff under that  
19 particular paper, there is a previous precedent that the  
20 industry has provided, which is the NSAC-125 document, which  
21 does get you a certain latitude, if you will, that the staff  
22 previously has not adopted.  
23 There is a position that has some history to it  
24 there if, in fact, the Commission were to decide that the  
25 real opportunities for 50.59 were in the risk-informing or

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1 risk-basing part 50 or portions of part 50 in the future,  
2 and that's a different track than we have taken before, but  
3 it is one that I think we have to pass through given how the  
4 processes are currently lining up.  
5 MS. MCKENNA: Perhaps we can move on to the next  
6 slide and talk about a little different aspect of this  
7 paper.  
8 As the Commission knows, in the proposed rule, we  
9 also put out a number of proposed changes on part 72, and in  
10 particular, section 72.48, which is the counterpart to 50.59  
11 in part 72 for fuel storage facilities.  
12 Those changes also included changes with respect  
13 to FSAR updating for these facilities and to extend the  
14 authority from the licensees to certificate-holders under  
15 part 72.  
16 In the comment period, we did get a number of

17 comments with respect to the changes we had offered in part  
18 72, and number of them suggested that there be closer  
19 connection between the language of 72 and in part 50 even  
20 beyond what we had offered, and in fact, many of the  
21 comments went to the parts of the rule that were already  
22 there that we weren't proposing to revise but that were kind  
23 of within those same general sections of the rule, and a  
24 couple of them, in particular, that I've listed here, where  
25 we had comments, in 72.48, there are, in addition to the

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1 same seven, if you will, 50.59 criteria, there are two  
2 additional criteria, one being significant occupational  
3 exposure and the other being significant environmental  
4 impact, and commenters on part 72 said that they really felt  
5 that, in some ways, this was disproportionate, that having  
6 those criteria for part 72, where they don't exist in part  
7 50, you know, didn't really reflect the relative  
8 significance of the kinds of facilities and that, at least  
9 in the case of the certificate holders, it would not be  
10 possible to judge the environmental impact, because they  
11 were -- they don't have that kind of document to judge it  
12 against.

13 Staff is supportive of the commenters' desires to  
14 make some adjustments in the language, and you'll see that  
15 in the proposed language that was offered to you.

16 The other issue had to do with some of the  
17 specifics about the FSAR updating, for example, there's a  
18 12-month period for submitting the updates, whereas in  
19 50.71(e), it can be up to 24 months, and again, it was a  
20 question of whether there was a need to have the different  
21 frequency, and I think the staff view at this point is that  
22 it's not necessary to have 12 months for one and 24 for the  
23 other, so we're proposing to go to 24 for all of them.

24 CHAIRMAN JACKSON: How will we monitor licensees'  
25 part 72 performance?

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1 MS. McKENNA: I might ask Marty to address that.

2 MR. VIRGILIO: Chairman, we have an inspection  
3 procedure, we have implemented that procedure, and we intend  
4 to continue to do that in the future.

5 With these changes, if approved by the Commission,  
6 we would have to modify the procedure. We would need also  
7 to modify the guidance that would also supplement the  
8 implementation of this new method, but we've got an existing  
9 72.48.

10 We've recognized fewer changes. If you were to  
11 compare it to a reactor, there are just a handful of changes  
12 at the facilities, mostly during the design and start-up  
13 phase.

14 So, we've got experience in implementing the rule  
15 and inspecting against the implementation.

16 CHAIRMAN JACKSON: Okay.

17 COMMISSIONER MCGAFFIGAN: Are you going to address  
18 part 71?

19 MS. McKENNA: Yes, that's the next slide, if there  
20 are no more further questions on part 72.

21 Some of the other comments received had to do with  
22 part 71 -- that is, transportation requirements, and these  
23 arose primarily for those casks that serve both a storage  
24 and a transportation purpose, and the comment was really,  
25 well, you're going to allow us to do it under part 72, but

1 if there is a transportation function, you know, we don't  
2 have that flexibility under part 71.

3 Again, the staff, I think, agrees that it would be  
4 appropriate to look at this area further, and I think the  
5 preliminary suggestion is that we would like to add language  
6 to address spent fuel transportation packages for domestic  
7 use.

8 The thinking was, to go more broadly in part 71,  
9 timing and our knowledge base may not be there to cover all  
10 the kinds of packages that might be covered by part 71,  
11 limiting it to domestic shipment, because of the IAEA  
12 standards and whether we -- which don't have this kind of  
13 provision within them.

14 So, the recommendation is to go with the proposed  
15 rule to make these kind of changes in part 71.

16 COMMISSIONER MCGAFFIGAN: Could I ask -- when we  
17 started this whole process, the notion was we were going to  
18 look at all these change mechanisms, I thought, outside of  
19 high-level waste, which is being treated in part 63. Why  
20 wasn't this part 71 thing rounded up as part of our proposed  
21 rule-making this time?

22 MS. MCKENNA: I think part of it was the IAEA  
23 consistency that was being looked at, and then I think we  
24 really came to recognize the dual use, but perhaps we felt  
25 that we needed to be a little more flexible.

1 I don't know if you have anything else, Marty.

2 MR. VIRGILIO: Commissioner McGaffigan, we were  
3 also looking at the fuel facilities, part 70.72. We just  
4 put something out on the web yesterday soliciting additional  
5 comments, and what we've put out is an option that -- a  
6 proposed option that looks a little bit more like what we  
7 have here on 50.59 and an alternate version that's, I think,  
8 adjusted to recognize that we don't have FSARs, but we're  
9 using ISAs, slightly different.

10 The other area where we have a change mechanism is  
11 for the GDPs.

12 It's 76.68, and we chose not to approach that at  
13 this time because of the significant upgrading of the FSAR  
14 that's ongoing in process and also the conformance plans  
15 that these facilities are working to meet the agreements  
16 that we struck with them as part of the process of  
17 certifying those facilities.

18 So, we have looked broadly, and we've made some  
19 decisions about what we would and would not get into at this  
20 time.

21 MS. MCKENNA: If there are no further questions on  
22 part 71, I'll move on to the next slide.

23 We were looking at the question of implementation,  
24 and we're recognizing that there is some existing guidance.  
25 In 96-07, we have some existing inspection guidance that

1 whatever kind of rule results would likely require some  
2 changes to those documents.

3 I also noted that, in the area of Part 72, there  
4 really is no specific guidance other than the inspection  
5 guidance that Marty referred to, and we felt it might be  
6 useful to try to see if we could develop such a thing, and  
7 we would hope, perhaps, that we could work with NEI on  
8 seeing whether you could modify, perhaps, 96-07 to speak to

9 part 72 facilities or whether you would want some separate  
10 type of guidance.

11 You know, as I think Mr. Matthews mentioned, the  
12 question of the pervasiveness of the use of the rule, that  
13 it's not only within the licensees, it's also within the  
14 staff, all of our inspection staff, a number of our project  
15 staff, technical staff, all encounter 50.59 in their course  
16 of business, and there is going to be a training and  
17 implementation period for the staff, as well.

18 So, these kind of considerations lead to the  
19 recommendation that we had in the paper that would really be  
20 for an 18-month time period as to when a licensee must have  
21 made its changes to the rule.

22 We also recognize that there are -- because many  
23 of the changes that were being offered do provide more  
24 flexibility, that some licensees might wish to take  
25 advantage of that flexibility earlier.

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1 So, we didn't want to prevent that from happening  
2 but also wanted to allow sufficient time so people could  
3 have the guidance in place, have all the people trained that  
4 needed to be trained, revise procedures as necessary.

5 So, that's why we proposed the 18-month period for  
6 it to become effective but would include within the rule the  
7 provision that, if a licensee chose to do it sooner, they  
8 could do so.

9 We had the part about notifying us. Basically,  
10 we'd need to know under what set of rules that licensee is  
11 and how we should then look at their operation, either under  
12 the old rule or under the new rule, and so, that was the  
13 rationale for that proposal.

14 COMMISSIONER MCGAFFIGAN: If NEI hasn't completed  
15 96-07, rev whatever, and we haven't put out guidance, how do  
16 they get to the new rule?

17 When we had the discussion last summer, I remember  
18 Tony Pietrangelo and Harold Ray and company -- we were  
19 reaching the tree on consequences, minimal increase in  
20 consequences, which is different from 96-07 at the moment,  
21 but I think we're now all converged there, and that's good,  
22 but if they -- is that in the can?

23 I guess I'll ask NEI at the next panel, but they  
24 know how to change that part of 96-07 on consequences very  
25 quickly and get it out there?

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1 MS. MCKENNA: I think certain parts -- and that's  
2 probably one -- I think that the answer is yes. The  
3 question of whatever criteria seven looks like -- that may  
4 or may not be a longer period for development of guidance,  
5 and it was hard to judge exactly how long the guidance would  
6 take versus -- you know, development of the guidance, staff  
7 endorsement of the guidance, and then implementation of the  
8 guidance.

9 So, we tried to allow for what we thought would be  
10 a sufficient period of time but also said have the provision  
11 that, if things happen more quickly or the extent of the  
12 changes are less than was necessary, it could be sooner.

13 COMMISSIONER MCGAFFIGAN: The FSAR update  
14 guidance, which has been straightforward for a good six or  
15 eight months now, is grinding through a process, and I  
16 think, in this case, NEI doesn't mind, but it's grinding  
17 through a process that's taking about 15 months from the  
18 date that the treaty sort of got settled until it gets

19 endorsed, and so, 18 months may be -- I just -- I wish we  
20 could have done it faster, I guess, is what I'm saying, but  
21 I think this provision to allow earlier -- the rule taking  
22 effect earlier -- rule taking effect earlier, if the  
23 guidance is going to require a lot of work, effectively, you  
24 know, may turn out to be a two-week window or two-month  
25 window, but it's certainly not very long, given past

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1 history.

2 MS. MCKENNA: The last slide that we had was on  
3 enforcement.

4 This has always been an issue, I think, of  
5 concern, and in the period where we may be changing from one  
6 set of rules to another set of rules, we felt we needed to  
7 discuss this issue in a little bit of detail so the  
8 Commission could understand how we were proposing to look at  
9 issues that would arise in enforcement space, whether they  
10 be as a result of an examination of an evaluation that was  
11 done some time ago or an evaluation that's done during the  
12 period of -- from when the rule is finalized to when it  
13 becomes implemented, and we do recommend continuing the use  
14 of discretion with respect to issues of low significance,  
15 and we did try to give some specific items about how we  
16 would do that in the paper -- for example, that if it's  
17 looking at something that would be viewed as a violation  
18 under the existing rule but would not be a violation under  
19 -- had it been done when the new rule was effective, that we  
20 would not issue -- take an enforcement action for that  
21 particular action, and I think another one we mentioned here  
22 was -- it is kind of in the existing policy of -- call it  
23 the good faith misunderstanding, if we felt that a licensee  
24 was really attempting to implement the rule and, because of  
25 some confusion on terms or clarity in the guidance or

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1 whatever, that if there was not some other reason that, you  
2 know, because of the significance of the issue, then again  
3 we might refrain from issuing -- taking an enforcement  
4 action.

5 CHAIRMAN JACKSON: How long would that go on?

6 MS. MCKENNA: I think we were thinking that those  
7 would be through the 18-month period and perhaps a little  
8 beyond that, just until we're, I think, satisfied that  
9 things are clear and straight.

10 CHAIRMAN JACKSON: So, not for 20 years.

11 MS. MCKENNA: Not for 20 years, no. It's a  
12 transition approach.

13 I think what we said in the paper was that, after  
14 that, you know, after we felt the rule was in place and  
15 people should understand it, that -- revert back to it, if  
16 they don't seek an amendment when it's necessary, that that  
17 would be a level three.

18 CHAIRMAN JACKSON: You'd need to have clarity  
19 about how long you would do that.

20 COMMISSIONER DICUS: Madam Chairman?

21 CHAIRMAN JACKSON: Yes, please.

22 COMMISSIONER DICUS: I have a question about the  
23 recommendation.

24 Specifically, early on in the 18-month period,  
25 before the rule goes into effect -- I'm assuming we are

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1 going forward with the rule.  
2 CHAIRMAN JACKSON: Hope springs eternal.  
3 COMMISSIONER DICUS: The staff won't be trained on  
4 this. How does that impact your recommendation on  
5 enforcement?  
6 MS. McKENNA: I think one of the things we  
7 indicated in there, we would continue to have the  
8 enforcement panel in place to try to deal with those  
9 questions that arise of wherever the confusion is, whether  
10 it's on our staff's part or with the licensee's part, that  
11 -- and one of the reasons, also, for using discretion is to  
12 recognize that, you know, people aren't going to be looking  
13 at these things in all the same way while we're in this  
14 transition.  
15 It's been kind of -- that's been kind of the  
16 situation for the last few years, I think, to a certain  
17 degree, that there are questions sometimes of a particular  
18 inspector looking at a change and looking at the rule and  
19 really trying to see, well, what is the answer here?  
20 I mean there's a spectrum. There's cases where  
21 everybody agrees it was clearly one side or the other.  
22 There's always a space in the middle where different  
23 people's view as to whether -- was that, you know, a  
24 malfunction of equipment that was created or what really  
25 happened as a result of the change, and I'm not sure we can

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1 totally resolve that.  
2 We tried to deal with it through some of these  
3 other provisions.  
4 CHAIRMAN JACKSON: Okay.  
5 MR. COLLINS: Commissioner Dicus, I think there is  
6 -- if I understood your question correctly, we learned a bit  
7 from the maintenance rule application and that there's  
8 really two types of confirmatory reviews that need to be  
9 done.  
10 One is the process itself, which, when we  
11 implemented the maintenance rule, was more of a programmatic  
12 review, if you will, deterministic type of review, than an  
13 application type of review.  
14 With that background and with the benefit of the  
15 maintenance rule, I think we'll have to work with the  
16 industry and amongst the staff to determine how to do those  
17 two separate reviews and with what touch and what frequency.  
18 Clearly, there's process implications of this, not  
19 for ourselves but for licensees, as far as implementation,  
20 and then there is the individual application. Each of those  
21 will have to be defined.  
22 We were taken to task as an agency initially  
23 because we took enforcement based on the process reviews. I  
24 think we would want to go back and revisit that to determine  
25 whether that's the right approach and ensure that we have

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1 consistency with process application, process  
2 implementation, before we look at the application.  
3 CHAIRMAN JACKSON: Anything else?  
4 MS. McKENNA: There's one other topic I was just  
5 going to mention, going back to the slide we had on policy  
6 issues, which was the question of recommendation on scope.  
7 We didn't actually provide a slide on this, but I did want  
8 to mention it, because it is an issue that had been raised  
9 by the Commission and was addressed in the paper.  
10 We indicate in the paper what we had tried to do

11 with respect to the definitions of change in facility as  
12 described in the FSAR, which in a way is a question of  
13 dealing with what are those changes that have to be looked  
14 at with respect to the evaluation criteria. So, it's a way  
15 of getting at this issue.

16 Beyond that kind of definition, the staff did not  
17 really see a particular benefit or need to try to make a  
18 change to the scope of 50.59 at this time.

19 I think we recognize there are other initiatives  
20 going on in the risk-informed arena that are addressing  
21 scope and that, obviously, as part of that process, the  
22 question of what's the right scope for 50.59 would need to  
23 be looked at, but we didn't really see that it was something  
24 to pursue as a separate initiative.

25 CHAIRMAN JACKSON: Anything else?

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1 DR. TRAVERS: That concludes our presentation.

2 CHAIRMAN JACKSON: Thank you very much.

3 We'll have Mr. Beedle and Mr. Pietrangelo from NEI  
4 come forward.

5 CHAIRMAN JACKSON: Good afternoon.

6 MR. BEEDLE: Madam Chairman --

7 CHAIRMAN JACKSON: Welcome back.

8 MR. BEEDLE: -- good afternoon. Appreciate the  
9 opportunity to discuss 50.59. I would probably -- I would  
10 like to agree with Mr. Matthews that we are on a convergence  
11 course but sometimes I get the distinct impression we are  
12 approaching this thing asymptotically.

13 CHAIRMAN JACKSON: Well, you know, it could be a  
14 Bessel function.

15 MR. BEEDLE: Could be. Could be.

16 CHAIRMAN JACKSON: Do you know what a Bessel  
17 function is?

18 MR. BEEDLE: Oh, yes, yes.

19 We probably don't disagree perhaps as much as it  
20 would appear in some of these comments with where the Staff  
21 is going. I do feel that we do need definition of some of  
22 these terms, in terms of margin and so forth and negligible.  
23 I don't think we are all that far apart. We think that by  
24 sticking to negligible we kind of stayed below the boundary  
25 that the Staff has set and so we are comfortable with that,

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1 although I recognize the difficulty that presents from  
2 perhaps a legal point of view in trying to deal with some of  
3 the margin issues.

4 But what I told Tony, that he is going to provide  
5 absolute clarity to this issue of minimal and negligible, so  
6 that is his challenge, to try to make sure that we  
7 understand what that is all about before we leave today, but  
8 we do appreciate the opportunity and I will turn it over to  
9 Tony to discuss some of these issues.

10 MR. PIETRANGELO: Well, why don't we just jump  
11 right into the lion's mouth on minimal versus negligible,  
12 and I think Commissioner McGaffigan basically explained our  
13 position on this --

14 COMMISSIONER MCGAFFIGAN: That there was a  
15 mistake.

16 [Laughter.]

17 MR. PIETRANGELO: At the current time there is no  
18 intent on our part to change the existing guidance in 96-07  
19 on negligible. We think there's some comfort gained in

20 that, that the industry knows negligible meets minimal based  
21 on the Commission's SRM from last year on this. Just  
22 because it says negligible in the industry guidance does not  
23 preclude someone from trying to go further than that. At  
24 this point in time we have not taken the effort to try to  
25 define minimal any further in a qualitative way, plus we

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1 wanted to leave the door open for potential quantitative  
2 approaches to defining minimal in the future or probability  
3 when the rule becomes more risk-informed.

4 But in the meantime if someone wants to take a cut  
5 at a qualitative attempt to go beyond negligible and still  
6 be less than minimal, there is no reason why our guidance  
7 would preclude them from doing that, and maybe through some  
8 people taking a stand at that we could incorporate that back  
9 in our guidance.

10 I don't know how much of a problem it presents not  
11 having it defined in the rule but just because it is not  
12 defined doesn't mean it is inconsistent with the  
13 consequences of minimal either -- necessarily mean it is  
14 inconsistent, so again we are going to leave it as is for  
15 now, but it does not preclude one of our members from trying  
16 to take it a little bit further either qualitatively or  
17 quantitatively and they will have to make their case and  
18 make it stand up with the Staff when they make a change.

19 CHAIRMAN JACKSON: But how would you propose that  
20 licensee engineers or NRC inspectors or enforcement  
21 specialists or others determine whether a change that is  
22 greater than negligible satisfies the minimal standard?

23 MR. PIETRANGELO: Well, I think even some of the  
24 things Commissioner Diaz mentioned is a way to do it. I  
25 mean I could brainstorm other ways to do it but again we

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1 have not had a great deal of problem in the implementation  
2 of this regulation over the years with negligible standards,  
3 so I suspect most people will stay to that for the time  
4 being, and maybe when we have a little bit more time and  
5 when the rule becomes more risk-informed we can devote some  
6 more resources in taking a cut at that, but we would  
7 encourage you to keep the rule language of minimal to allow  
8 that growth to occur in the future.

9 CHAIRMAN JACKSON: Right, but if you are going to  
10 risk-inform Part 50 and this is part of it, you know, the  
11 rule may look completely different --

12 MR. PIETRANGELO: It may, Chairman, but perhaps  
13 not.

14 CHAIRMAN JACKSON: -- this is artificiality having  
15 to do with the fact that you are still dealing with the  
16 design basis rule and you are trying to build flexibility  
17 into a design basis rule.

18 MR. PIETRANGELO: Right.

19 CHAIRMAN JACKSON: If you can risk-inform the  
20 rule, a lot of this stuff goes out the window.

21 MR. PIETRANGELO: Perhaps. The criteria may stay  
22 exactly the same but the scope is really what needs to  
23 become risk-informed and then I am not certain the criteria  
24 would necessarily have to change so --

25 CHAIRMAN JACKSON: But you are not certain that

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1 they won't have to change it --

2 MR. PIETRANGELO: I am not certain about that

3 either.  
4 Okay. Could we go to the second slide, please.  
5 First of all, thank you very much for releasing a SECY so  
6 quickly last week. Let me take a moment to commend the job  
7 the Staff did in pulling the SECY together. On the web page  
8 I kind of browsed through the 59 comment letters that were  
9 received by the Staff and I don't know how many pages it is,  
10 but it is probably well over 300 pages of comments that the  
11 Staff had to address.

12 We were quite surprised that the SECY addresses  
13 and dispositions all the comments. In fact, we only  
14 expected to see proposed language and a rationale for it,  
15 but we did not expect to see the disposition and the  
16 comments. On first blush it looks like they were really  
17 done, dispositioned well by the Staff in the short timeframe  
18 they had from the comment deadline. That is just one heck  
19 of a job by the Staff.

20 Again, it appears to us that the comments have  
21 been adequately resolved in most of the areas. I am going  
22 to limit almost in its entirety our remarks to the margin of  
23 safety criteria and from our perspective we see that is as  
24 the last issue that needs to be addressed to meet the  
25 Commission's objective with this rulemaking. Next slide,

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1 please.

2 In the short time that we had, we used the two  
3 groups we have used for the last three years in trying to  
4 look at changes to 50.59. We distributed the SECY to our  
5 50.59 task force and the regulatory process working group  
6 that Harold chairs. We had conference calls with each group  
7 yesterday to try to get feedback on the document so that we  
8 are not just shooting from the here, so we have had some  
9 discussion with the task force and the working group.

10 Nevertheless, it has not been a lot of time to  
11 digest the paper. We did not have the benefit when we had  
12 these conference calls of hearing the Staff's presentation  
13 or talking to the Staff. We did have a brief telephone  
14 conversation this morning with the Staff, so we didn't have  
15 that full understanding of where the Staff was going and why  
16 they were going that way, so some of the concerns you may  
17 see in here may be -- certainly they are preliminary but  
18 perhaps with a better understanding we would not have the  
19 concerns we have today, but I am going to go through with  
20 what we came up with with the task force and working group.

21 I think there is also going to be a need for some  
22 more dialogue but in terms of what you said to open,  
23 Chairman, it is time to fish or cut bait and I think the  
24 paper's before you and the Commission needs to decide on  
25 this issue. Next slide, please.

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1 The next two slides are really the concerns  
2 expressed then. These are kind of the consensus ones that  
3 came out of the discussion with the task force and working  
4 group.

5 Let me start just conceptually, first of all, with  
6 what is margin of safety. That has been the issue. It was  
7 not defined in 1968 when the rule was promulgated. We took  
8 a cut at that. I have got a slide later on from the  
9 statements of considerations in 1968 on that.

10 What we see in the Staff's proposal, at least our  
11 preliminary concern, is that they have taken this concept

12 and we think it does apply only to the fission integrity of  
13 the fission product barriers. That was its purpose and  
14 trying to take that margin of safety concept down to the  
15 system and the component level is misapplying the intended  
16 concept of margin of safety.

17 We talked a little bit about the scope of the  
18 evaluation being extended being tech specs. First of all,  
19 the tech specs are not consistent at all plants and the  
20 scope of the margin of safety criterion has been the basis  
21 for any tech spec so unless the Staff has a concern in terms  
22 of what people have been doing in that regard over the  
23 years, to say that the tech specs does not, has not -- that  
24 scope for this criterion has been inadequate -- I mean that  
25 is the case you would have to make to expand the scope

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1 beyond what it currently is.

2 We do think, and I think this was really  
3 articulated in Commissioner Diaz's vote on the original  
4 paper, that there is a lot of redundancy with this criterion  
5 and tech specs, and that is part of why we went back to look  
6 at the statements of considerations in '68 and looked at  
7 what they said, what the criteria for the content of tech  
8 specs is to try to make some sense out of that, and  
9 expanding the margin of safety concept down to the system  
10 and component level really just turns the concept on its  
11 head, and it is even more than what people have been doing  
12 in the past so it is an expansion of the scope.

13 But again, to take margin on fission product  
14 barriers and equate it with I will call it design margin at  
15 a component level, and there's parts of the SECY, even  
16 though the Staff says in the paper that this is primarily  
17 intended to look at it at the system level, if you read  
18 further in the SECY it does go down to component level,  
19 piping, pumps, supports, et cetera, and that is a vast  
20 expansion of what we believe margin of safety was intended  
21 to do. Next slide, please.

22 CHAIRMAN JACKSON: Before you go on, let me talk  
23 to you about these bullets. Let me talk about, first of  
24 all, this idea of expanding the concept beyond the fission  
25 product barriers to the component level. I mean aren't the

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1 plants -- weren't they designed, reviewed and licensed at  
2 the structure, system and component level?

3 MR. PIETRANGELO: That's a pretty broad question.

4 CHAIRMAN JACKSON: I mean that is my  
5 understanding.x

6 MR. PIETRANGELO: Well, my understanding is that  
7 when you get a licence you have to do a number of analyses  
8 and demonstrate that your plant can be placed in a safe  
9 condition --

10 CHAIRMAN JACKSON: I understand that, but I  
11 want -- I need an answer to that question. Are the plants  
12 designed, reviewed and licensed at the system, structure and  
13 component level, yes or no?

14 MR. MATTHEWS: Yes.

15 MR. BEEDLE: Yes, they are.

16 CHAIRMAN JACKSON: Okay, so I guess I am trying to  
17 get at then if that is the case, okay, why a 50.59 approval  
18 criteria at the component level is unacceptable.

19 MR. PIETRANGELO: I didn't say that. I didn't say  
20 that. I am talking specifically about the margin of safety  
21 criterion and the next slide will talk about redundancy with

22 the other criteria in 50.59, but I think this is indicative  
23 of what happens sometimes. We know this has been the  
24 remaining issue on 50.59. There's another six criteria in  
25 the rule but we have got the blinders focused on --

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1 CHAIRMAN JACKSON: Well, this is --  
2 MR. PIETRANGELO: -- margin of safety criteria.  
3 CHAIRMAN JACKSON: This is the particular issue  
4 that you put the blinders on based on your discussions, so I  
5 am -- you know, my eyes are going where your eyes have gone.  
6 MR. PIETRANGELO: Okay.  
7 CHAIRMAN JACKSON: Okay? Therefore, we are going  
8 to talk about it. Doesn't the SECY paper say that component  
9 level reviews will be limited to the fission product  
10 boundary -- the fission product barrier of the reactor  
11 coolant system boundary with other components only being  
12 evaluated at the system level?  
13 MR. PIETRANGELO: It supports systems. I think  
14 the tech specs when you ask the question about are the  
15 systems and components licensed, I think primarily that is  
16 done within the technical specifications.  
17 CHAIRMAN JACKSON: Let me ask you about your  
18 second bullet where you talk about the scope of the  
19 evaluation being expanded beyond tech spec system.  
20 Hasn't the definition of operability, which  
21 includes required support systems, always made the scope of  
22 50.59 reviews greater than the tech specs themselves?  
23 MR. PIETRANGELO: All this bullet is intended to  
24 convey is that the current language in the rule is the basis  
25 of any technical specification.

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1 I am not arguing the point, Chairman.  
2 COMMISSIONER DIAZ: Say that again, please.  
3 MR. PIETRANGELO: The current language -- "You  
4 shall seek an amendment if there is a reduction in safety as  
5 defined in the basis for any technical specification."  
6 CHAIRMAN JACKSON: And relative to the third  
7 bullet in terms of this apparent redundancy with tech spec  
8 controls, as I understand tech specs, they typically require  
9 that the structures, systems and components be capable of  
10 performing their design safety function and as I understand  
11 the proposed 50.59 language, licensees would be required to  
12 obtain NRC approval before making changes that altered  
13 design safety functions.  
14 Now that sounds complementary as opposed to  
15 redundant to me.  
16 MR. PIETRANGELO: I go back to the original point  
17 that these are controlled in tech specs. If you make a  
18 change to -- and it is the first part of 50.59 involves a  
19 change to the tech spec it kicks you out of 50.59 and you  
20 are seeking an amendment, so there's some redundancy. I  
21 don't think there is any question about it.  
22 I don't think they are complementary at all.  
23 CHAIRMAN JACKSON: Well, they are complementary in  
24 the sense that there's variability of the tech specs as you  
25 go from plant to plant.

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1 MR. PIETRANGELO: That's true.  
2 CHAIRMAN JACKSON: And in the sense that what the  
3 tech specs control relative to SSCs performing their design

4 safety functions can vary.  
5 MR. PIETRANGELO: But the variability has been  
6 there since day one --  
7 CHAIRMAN JACKSON: That's correct and --  
8 MR. PIETRANGELO: -- across the spectrum of plants  
9 because the tech specs have been there.  
10 CHAIRMAN JACKSON: That is correct, but if you are  
11 talking about proposed changes that can be made without  
12 coming in for prior review --  
13 MR. PIETRANGELO: Right --  
14 CHAIRMAN JACKSON: -- then one wants to understand  
15 that this envelope in terms of design safety functions not  
16 being compromised is maintained.  
17 MR. PIETRANGELO: Before we leave this slide,  
18 again conceptually on margin of safety -- maybe it is better  
19 to go to the next slide because I think that is the first  
20 bullet on here -- in terms of redundancy with other  
21 criteria.  
22 CHAIRMAN JACKSON: Okay.  
23 MR. PIETRANGELO: What was three criteria before  
24 are now a proposed seven, possibly eight.  
25 We have got probability of an accident. We have

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1 got probability of malfunction. We have got consequences of  
2 an accident. We have got consequences of malfunction. We  
3 have got accident of a different type and we have got  
4 malfunction of a different result.  
5 Now even in discussions with the ACRS with Dr.  
6 Apostolakis, he said, well, if you have got the probability  
7 and the consequences, you put those together, that's the  
8 risk. What else is there? And our point here with  
9 redundancy with other criteria, and that is why I think the  
10 Staff's papers falls short is that they are concerned that  
11 what we proposed might be too narrow, but there is no  
12 objective evidence that it is, and we point to -- and we  
13 went through 10 examples in our 25-page basis for what we  
14 proposed in the comments on the rule, examples of stuff that  
15 was related to the barriers and not related to the barriers  
16 and how they would be addressed under the criteria we had  
17 proposed.  
18 I think these are very, very broad criteria and it  
19 covers the spectrum of the performance of the equipment and  
20 a lot things you just mentioned, Chairman -- the design  
21 functions and things.  
22 I see margin of safety as kind of a sanity check  
23 or backup after you get done with all this stuff. Have I  
24 done anything that affects those fission product barriers?  
25 Because I have covered them individually through these other

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1 things.  
2 Is there some combination of what I have done that  
3 has affected the integrity of those barriers? That is what  
4 margin of safety is about, not down to the system and  
5 component level and trying to apply this principle.  
6 The next point is that you can't. There are no  
7 curves on a lot of the systems or analysis results that you  
8 can compare to a design basis limit.  
9 Second point is that a lot of the component level  
10 things don't have 50.2 design basis limits. They are pretty  
11 much up at the plant and system level so I am even  
12 concerned -- I want to make sure this is not just me, this  
13 is concerns from the task force and the working group --

14 that what the Staff has proposed can even be done, because  
15 there are no analysis curves to apply to it at the system  
16 level.

17 CHAIRMAN JACKSON: Mr. Matthews, what would you  
18 say to that?

19 MR. MATTHEWS: I think that is why we look at the  
20 multiplicity of criteria. Our hope is that the fabric of  
21 those criteria will address those instances where there  
22 might not be a design basis capability addressed, but where  
23 there is a design basis capability addressed I think it is  
24 of significance because, as we keep going back to, it was  
25 the licensing basis of the plant.

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1 CHAIRMAN JACKSON: Commissioner Diaz?

2 COMMISSIONER DIAZ: You talk about hierarchy in  
3 here or rules, you know, and the Chairman referring to  
4 structures, systems and components and, you know, Appendix A  
5 and 50.34 --

6 MR. PIETRANGELO: A bunch of them.

7 COMMISSIONER DIAZ: Right, and you getting there  
8 and you start talking about integrity of fission product  
9 barriers and then of course the immediate question is how do  
10 you define integrity. Do you define it in terms of  
11 functionality or maybe a better question now -- no, it's not  
12 a question, it is a statement -- is what is the relationship  
13 between functionality as applied to fission product barriers  
14 and technical specifications. I mean isn't the technical  
15 specifications in the hierarchy, you know, kind of the  
16 second level that try to explain the functionality that will  
17 apply to determine the integrity of fission product  
18 barriers?

19 MR. PIETRANGELO: I think there is a hierarchy and  
20 I think that you are right, Commissioner, but at least in  
21 the proposed approach that we made we took parameters that  
22 would try to measure the integrity of the barriers, and they  
23 are well known -- they have been in NSAC 125 since 1989 --  
24 and try to use that set, and we didn't represent it as a  
25 complete set -- there may be other ones -- to try to gauge

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1 what the integrity of the barriers are, and they are not  
2 hard to do I don't think.

3 COMMISSIONER MCGAFFIGAN: Could I ask an  
4 implementation question that will help me probably on this?

5 If we decide that we want to go back to what you  
6 proposed, and I regard it as a good faith effort to define  
7 this term, "margin of safety," that wasn't previously  
8 defined, do you -- the comments that you put together in  
9 order to make that proposal to the Staff is there the  
10 essence of any change that you would have to make to NEI  
11 96-07 and could you do it very promptly?

12 If this issue were resolved that way, could 96-07,  
13 Rev whatever, be out quickly?

14 MR. PIETRANGELO: I believe so. We have been  
15 keeping track of changes that we would make to Rev Zero.  
16 Obviously you have to wait for the final rule to be able to  
17 make conforming changes to the guidance, but actually if you  
18 just look at the margin of safety criteria, which is the  
19 area that may change the most, what was written in 1989 is  
20 pretty darn consistent with --

21 COMMISSIONER MCGAFFIGAN: Close.

22 MR. PIETRANGELO: -- with what we are saying now

23 and in fact the example cited in that document were fission  
24 product barriers and the parameters we pulled out were  
25 pulled out of NSAC 125.

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1 COMMISSIONER MCGAFFIGAN: Whereas what the Staff  
2 is proposing and the broadening they are proposing there  
3 would be a long discussion if the Commission decides to do  
4 that presumably to tie down what a lot of these undefined  
5 terms mean.

6 MR. PIETRANGELO: I believe there would be,  
7 Commissioner, and I got to tell you, I mean we are making  
8 progress in other activity on design basis but today I do  
9 not have confidence that we have it nailed down at the -- I  
10 think we have the big stuff nailed down, and the reason we  
11 had confidence in the fission product barrier approach is  
12 that I can be very prescriptive in 96-07 about what the  
13 design basis limits are on the fission product barriers I  
14 think without too much discussion.

15 I am not sure I could be that confident when I  
16 start going out to the system and component level.

17 COMMISSIONER MCGAFFIGAN: And the other question I  
18 had, you are the ones who came up with this exceeded or  
19 altered?

20 MR. PIETRANGELO: I am going to explain that when  
21 we get to the chart.

22 COMMISSIONER MCGAFFIGAN: Okay.

23 MR. PIETRANGELO: There is a very good explanation  
24 for that.

25 We have already started in on this use of

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1 undefined terms --

2 CHAIRMAN JACKSON: You know, I think we ought to  
3 set that one aside because there's inconsistency. It seems  
4 that we are willing to take undefined terms if it, you know,  
5 makes us comfortable -- and that's us too -- but we are not  
6 willing to take undefined terms if it doesn't make us  
7 comfortable, and so if the standard is undefined terms, we  
8 all better go back and get everything defined and start  
9 over, and so I just think we ought to just skip on down the  
10 line, because, you know, one man's undefined terms is  
11 another woman's defined terms.

12 MR. PIETRANGELO: Okay. Let me go to a defined  
13 term then -- definition of change. Eileen went through this  
14 in some detail.

15 The key addition to that definition of change is  
16 that we pick up changes in methodology. In the proposed  
17 rule in the statements of considerations there was also  
18 language regarding the need to use terminology that has been  
19 approved by the Staff and there is another sentence about  
20 common practice in the industry, so we think that we  
21 addressed this concern about consistency and use of  
22 terminology by incorporating changes in methodology to  
23 receive a full 50.59 evaluation, so we don't think there is  
24 a need for a separate criteria later on that has been  
25 proposed in the SECY on this point, that including it in the

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1 definition of change and in the statements of consideration  
2 and the rule, and we do plan to amplify this portion of our  
3 guidance regarding methodology, and one last thing --

4 CHAIRMAN JACKSON: Let me ask you though how do  
5 licensees today control analysis methodologies that are not

6 part of the 50.46 LOCA analysis?

7 MR. PIETRANGELO: You mean in terms of 50.59,  
8 Chairman?

9 CHAIRMAN JACKSON: Yes.

10 MR. PIETRANGELO: The guidance has been if you are  
11 going to change the method to do it both ways to see what  
12 the difference was, and then to report to the Staff what the  
13 difference has been in the two methodologies, but there was  
14 one part that Eileen got into that I wanted to clarify about  
15 potentially masking changes in methodology with an actual  
16 change to an input parameter of the plant.

17 The way the guidance is currently written, you  
18 cannot group changes unless they are interdependent. That  
19 is, if you had a change in methodology you would have to  
20 evaluate that on its own, and unless it was a bunch of  
21 changes in the methodology all at the same place you would  
22 look at that in its entirety but you wouldn't take some  
23 design change with a methodology change and do a single  
24 50.59 on them.

25 Therefore, you would be able to discern whether

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1 the change in methodology had an increase that was more than  
2 minimal in consequences or had an impact on margin of  
3 safety.

4 COMMISSIONER MCGAFFIGAN: Madam Chairman, on that  
5 point my recollection is the famous risk-informed Reg Guides  
6 also make a similar point, that you can't, you know, package  
7 changes, so this is not new turf for us.

8 CHAIRMAN JACKSON: Right. Right. Okay, let's go  
9 to the next slide.

10 I wanted to put this in the presentation to  
11 provide in part how we arrived at fission product barriers  
12 and we went back to the original rule and there it was, and  
13 that is truly what guided the proposal that the task force  
14 developed. Next slide, please.

15 Here is where we can explain exceeded or altered,  
16 Commissioner.

17 When we put exceeded or altered in our wording for  
18 the new Criterion 7, the exceeded applied to a change in the  
19 analysis result -- that is the curve here -- that would go  
20 above the limit. Altered means a change in the limit  
21 itself, so there are two separate things, and so it is not  
22 one is covered by the other. The exceeded has to do with  
23 the analysis result; the altered has to do with the limit  
24 itself and to clarify Dave's point on this about design  
25 basis being important things, we put the altered in on the

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1 limit, not just non-conservative, because design basis  
2 limits on fission product barriers are big deals and if you  
3 are going to change that, you should come in for prior  
4 review and approval.

5 I would argue that other types of design basis  
6 limits on systems and components and things aren't that big  
7 a deal and we wouldn't use the altered language in that  
8 regard.

9 Does that clarify the --

10 COMMISSIONER MCGAFFIGAN: Okay.

11 MR. PIETRANGELO: Okay. Let me say one more thing  
12 about -- this chart as we have worn it out, this originally  
13 appeared in NSAC 125 in 1989. It was reproduced in NEI  
14 96-07 as is, so this is what the industry has been using for

15 quite a number of years now, and again, it is still in  
16 there.

17 Talking about some of the terms that are used in  
18 here, one thing -- we tried to listen to the Staff's  
19 concerns about -- before, when the discussion was, well, is  
20 margin of safety between the top of the curve and the limit,  
21 and there was a concern about what methods you are using or  
22 have you changed an assumption in the method and such.

23 We tried to listen to that and also in some of our  
24 guidance we said we would take the acceptance limit from the  
25 safety evaluation reports that the Staff did on the FSAR.

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1 There was a concern about whether the limits that were  
2 removed from SERs were legally binding on licensees. That  
3 is what led to our picking out the design basis limit for  
4 the fission product barriers. That is a value that appears  
5 in the FSAR. It is required to -- which would be legally  
6 binding -- so we thought we addressed that concern with the  
7 SER problem here.

8 Again, the things we talked about previously about  
9 methodology, including it in the definition of change,  
10 including some things in the statements of considerations  
11 and amplifying the guidance would address the Staff's  
12 concerns about how close you are getting to the limit and at  
13 least solidify the methods that were being used in this  
14 regard.

15 CHAIRMAN JACKSON: I think, Mr. Matthews, you  
16 wanted to make a comment?

17 MR. MATTHEWS: Yes. I wanted to go back to the  
18 point of the margin of safety criteria and its utility or  
19 usefulness seems to have been questioned from several fronts  
20 at times, and one of the concerns, and I think Eileen tried  
21 to make this point in response to Commissioner Diaz's  
22 question, we do have to deal with the issue of the quality  
23 and extent of analyses previously performed.

24 When you look at the six criteria preceding  
25 Criteria 7, they are always caveated by "previously

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1 evaluated in the final safety analysis report" -- whether  
2 you are talking about consequences, probabilities,  
3 likelihoods, whereas when you get to the margin of safety  
4 criteria it is the design basis capability of the structure,  
5 system and component, so you can't be guaranteed by virtue  
6 of the variability in FSARs, their quality, and of course  
7 since they formed the basis or the foundation for the tech  
8 specs, the variability and completeness of the tech specs as  
9 we look over the whole range of plants drives you to a  
10 concern, I believe, that you may miss something in those  
11 first six criteria that is design basis related, therefore  
12 important in terms of the safety function -- that these  
13 calculations of previous evaluations may not have reached  
14 to, so I think there is a benefit to having a margin of  
15 safety criteria to address the possible shortcomings that  
16 might exist in the existing FSARs and the existing analyses  
17 performed that developed the basis for the tech specs.

18 COMMISSIONER DIAZ: But only if the tech specs are  
19 not good?

20 MR. MATTHEWS: Pardon?

21 COMMISSIONER DIAZ: But only if the tech specs are  
22 not complete or good? If the tech specs are complete or  
23 good you don't need to have it, right?

24 MR. MATTHEWS: The need would be less.

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1 [Laughter.]

2 COMMISSIONER McGAFFIGAN: Minimal.

3 MR. PIETRANGELO: I think I agree with what David  
4 said but to a different degree.

5 I believe the margin of safety criterion is a  
6 backup also, but suppose you didn't have any of the rest of  
7 that stuff and all you did was the margin of safety criteria  
8 and let's say it was on our approach that is focused on  
9 fission product barriers. At least you would know those  
10 three principal barriers that protect the public health and  
11 safety are intact and you have full confidence in their  
12 integrity.

13 Despite any of the other stuff. The question is,  
14 it's really a scope question now on the criteria and what  
15 you apply it to. Do you have to go back and apply it, we  
16 think in a redundant manner, to the other systems and  
17 components, or do you do it in an integrated way as a check  
18 to make sure that barrier integrity is maintained? I think  
19 that is the question on the table.

20 MR. MATTHEWS: I will point out that there are  
21 some issues that we think that the margin of safety criteria  
22 reach to that may not be addressed in either tech specs of  
23 the other criteria. A good example is station blackout and  
24 coping time associated with station blackout. If you were  
25 to move from a six hour to a four hour coping time, you

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1 would have an issue that addresses concern associated with  
2 design basis and fission product barrier integrity, but I  
3 don't know of a matrix of the other criteria that would  
4 necessarily capture that in terms of a concern.

5 So, you know, we can argue the degree to which  
6 each plant would need a margin of safety criteria to ensure  
7 continuity of the design basis, and I think, you know, one  
8 person's example versus another person's example, you know,  
9 we could go on all day doing that. But the staff, again,  
10 viewed that there was a fabric, a criteria, and then there  
11 was an additional need for one addressing maintenance of the  
12 design basis capability within certain limits.

13 COMMISSIONER DIAZ: But that is why you have the  
14 rule itself, that is why there is a hierarchy, and that is  
15 why, you know, you cannot eliminate the station blackout  
16 rule just because you have a 50.59.

17 MR. MATTHEWS: But you might change it, and its  
18 implementation on a plant-specific basis, which did allow  
19 flexibility.

20 COMMISSIONER DIAZ: Can you? Once you have it  
21 established, can you change it? You can't change your  
22 station blackout conditions.

23 MR. MATTHEWS: Well, I think you could change your  
24 commitment.

25 COMMISSIONER DIAZ: Oh, you can change the

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1 commitment.

2 MR. MATTHEWS: Definitely.

3 COMMISSIONER DIAZ: Yes, you can change the  
4 commitment.

5 MR. MATTHEWS: And it could change the character  
6 of your design and the degree to which your plant is

7 protected under certain circumstances. So, yes, I think you  
8 could change it.

9 COMMISSIONER MCGAFFIGAN: But this is, earlier,  
10 when Eileen was talking, this is the first example we have.  
11 I guess I would be interested in Tony or Ralph's reaction to  
12 coping time for station blackout as the first specific  
13 example of something that will fall through the cracks if  
14 your fission product barrier criterion is the only  
15 criterion.

16 MR. PIETRANGELO: We had 10 examples in our  
17 approach on how -- on different things. I mean I would have  
18 to go through it for station blackout. But I think you  
19 still have to -- you don't use 50.59 to get out of  
20 compliance with the rule, you can't do that. You can't do  
21 that.

22 There was a coping analysis that was -- and I  
23 wasn't the station blackout person, so I have limited  
24 knowledge of this, but my understanding is that it was a  
25 coping analysis that was submitted to the staff. There is

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1 probably an SER associated with it. Okay. There are  
2 probably some commitments associated with that. And whether  
3 those are programmatic or hardware changes makes a big  
4 difference, too. If they are programmatic changes, they  
5 probably get screened out of 50.59 anyway, and it would be  
6 more attuned to a commitment management type approach to  
7 answer the question.

8 Hardware changes have to do with the diesel and I  
9 think they would be directly relevant to the questions in  
10 50.59.

11 COMMISSIONER MCGAFFIGAN: Could I ask Mr.  
12 Matthews, does he believe they could take out a diesel, if  
13 this isn't kept in the way you want it?

14 MR. MATTHEWS: It would surprise me that one of  
15 the other criteria wouldn't catch you first.

16 COMMISSIONER MCGAFFIGAN: You just made Mr.  
17 Pietrangelo's point.

18 CHAIRMAN JACKSON: But you have to have the other  
19 -- if you didn't have the other criteria.

20 MR. MATTHEWS: Pardon.

21 COMMISSIONER MCGAFFIGAN: No, no. I think you  
22 just made Mr. Pietrangelo's point, that the other criteria  
23 will keep you from doing that.

24 MR. MATTHEWS: In that instance, that is what I am  
25 agreeing with. Okay. I think the other criteria would --

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1 would prohibit you from making that change without NRC  
2 involvement, okay, because of the interrelationship between  
3 that and system performance relative to probability and  
4 consequences.

5 MR. PIETRANGELO: If there are no further  
6 questions on the chart, can we move to the next slide,  
7 please?

8 The intent with this slide was to help us  
9 understand what action is required. In looking back at the  
10 history, again, that chart hadn't changed since 1989. When  
11 there was a lot of interaction back then, and I was not a  
12 part of that interaction, but there were letters exchanged  
13 and correspondence exchanged. Margin of safety wasn't an  
14 issue, and that wasn't one of the reasons that was held out  
15 as not being able to endorse NSAC-125.

16 When we redid NSAC-125, and NEI 96-07, we received

17 a letter from the staff last January on the eve of our  
18 workshop. There were a couple of things that were laid out  
19 in that letter -- we would not be able to endorse the  
20 document in any event, and the others were you would have to  
21 have a rule change to be able to endorse what your guidance  
22 says. Margin of safety was not one of those elements, only  
23 about a year ago.

24 This real difference in interpretation came out at  
25 the June Commission briefing, and now it is on the table.

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1 And that brings us to the last slide.

2 CHAIRMAN JACKSON: Before you jump to the last  
3 slide.

4 MR. PIETRANGELO: Okay.

5 CHAIRMAN JACKSON: I am not going that fast, Tony.  
6 You know, again, I mean I need to have some understanding.  
7 As I read the staff's proposed criterion for design function  
8 capability, it seems that they are codifying the intent of  
9 the existing rule as described in your own guidance  
10 document, 96-07. And if you ultimately agree that that is  
11 the case, why would you oppose the proposed rule language?

12 I mean you have a sentence, a section in 96-07  
13 that is entitled, "Defense-in-Depth Philosophy in 10 CFR  
14 50.59."

15 MR. PIETRANGELO: Right.

16 CHAIRMAN JACKSON: And it says,  
17 "Non-safety-related systems are not excluded by the scope of  
18 10 CFR 50.59."

19 MR. PIETRANGELO: No.

20 CHAIRMAN JACKSON: "For example, instrumentation  
21 and control systems are explicitly addressed by the general  
22 design criteria. Certain losses of non-safety-related  
23 systems represent critical operational occurrences  
24 identified as initiators in the SAR accident analysis.  
25 Therefore, changes to non-safety-related systems described

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1 in the SAR must be considered and may be determined to  
2 involve a USQ under 10 CFR 50.50."

3 MR. PIETRANGELO: Right.

4 CHAIRMAN JACKSON: And, again, that is where I am  
5 confused.

6 MR. PIETRANGELO: Yeah, and I think that  
7 particular part of the document, Chairman, deals more with  
8 scope. We didn't want to be bound by "as described in the  
9 SAR." I think you have to look at things that aren't  
10 described in the SAR. The extent of changes across a plant  
11 can be very, very broad. We have had this discussion in the  
12 past about -- I think we sent letters to this effect, that  
13 tying the scope of 50.59 to the SAR is both too broad and  
14 too narrow at the same time.

15 CHAIRMAN JACKSON: Right. But what I am saying is  
16 we are talking design function capability, and so if you  
17 have, you know, non-safety-related systems whose  
18 functionality affects --

19 MR. PIETRANGELO: Right.

20 CHAIRMAN JACKSON: -- that of the safety-related  
21 systems, you are saying that you don't want to see anything  
22 in the rule that allows to be captured, is that what you are  
23 saying?

24 MR. PIETRANGELO: No, no. Again, I think we are  
25 confusing what the margin of safety criterion addresses in

1 the context of all the evaluation criteria. I am not saying  
2 to exclude any of that stuff. I am just specifically  
3 limiting our remarks to this margin of safety criterion and  
4 what its intent is.

5 CHAIRMAN JACKSON: Okay. Well, Mr. Matthews looks  
6 like he wants to say something again.

7 MR. MATTHEWS: In my view this issue has been  
8 sufficiently explored. I don't need to add anything.

9 CHAIRMAN JACKSON: Okay. Thanks.

10 COMMISSIONER MCGAFFIGAN: Just to clarify, I will  
11 always remember the June '98 Commission meeting and you  
12 going to the podium and saying that the problem is we have  
13 different words, we have different interpretations of what  
14 margin of safety means and everybody nodding. So, to some  
15 degree, this issue was always there, it was just not -- it  
16 was not dealt with.

17 MR. PIETRANGELO: Right.

18 COMMISSIONER MCGAFFIGAN: It was avoided.

19 MR. PIETRANGELO: Right.

20 COMMISSIONER MCGAFFIGAN: But it was a getcha --  
21 it was a gotcha that was going to getcha at some point.

22 MR. PIETRANGELO: That's right.

23 COMMISSIONER MCGAFFIGAN: So it is good that it  
24 out on the table.

25 MR. PIETRANGELO: I think it is good, and I think

1 the Commission should be commended for getting it out on the  
2 table. And we have talked -- yeah, Mr. Ray has talked about  
3 this at length, about not -- going forward in 1989 -- I mean  
4 we are as guilty as anybody for not insisting upon closure  
5 when that document was issued in 1989. We should not have  
6 allowed to get it. We developed a comfort zone, I think,  
7 with the staff on how this was implemented, because it was  
8 done so conservatively over the years, and as long as it was  
9 stable, people didn't complain about it. I think that was  
10 the reality back then. But we should and, hopefully, we  
11 will close this thing out the right way this time.

12 Can we go to the last slide, please?

13 To us, the objective has not changed since we  
14 started this activity, and that is to, if possible, simplify  
15 and clarify the rule to obtain stability. Our proposal is  
16 only way to do that. The staff's proposal may be another  
17 way to do that. I think I could probably come up with some  
18 others, maybe even based on the existing words that could do  
19 that. Okay. We are not looking for perfection here on the  
20 margin of safety criterion.

21 I think we are looking -- the objective here is  
22 stability. If we can get some efficiency and effectiveness  
23 at the same time, that's gravy. Stability is still the key  
24 issue, and we are interested in a timely resolution and our  
25 only, I guess, objection to the staff, it doesn't go beyond

1 -- I may be mischaracterizing it as does no harm here, but  
2 it could if we introduced new terms, and I think we have  
3 kind of discussed that at length, the potential that new  
4 terminology brings and implementation in the field and  
5 potential confusion could do harm to the stability  
6 objective.

7 So, finally, you know, we will do whatever is  
8 necessary. In terms of the guidance, Commissioner, I think

9 we can turn it around very, very quickly. We have been  
10 trying to keep up with the changes, and as well as on this  
11 last margin of safety criterion, whatever comes out of that.

12 But we still strongly believe in our proposed  
13 approach and that it meets the objective the Commission laid  
14 out last year, and yet we recognize there may be other means  
15 to achieving that objective. So, with that, that's our  
16 formal remarks. Thank you.

17 CHAIRMAN JACKSON: Commissioner Dicus?

18 COMMISSIONER DICUS: I am going to go back to the  
19 word "minimal," take us back to that discussion. We worked  
20 awfully hard last year to come up with that term, frankly,  
21 and for that reason I am somewhat reluctant to abandon it.

22 MR. PIETRANGELO: Which term are you referring to,  
23 Commissioner?

24 COMMISSIONER DICUS: Minimal.

25 MR. PIETRANGELO: Minimal.

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1 COMMISSIONER DICUS: But at the same time it has  
2 to be redefined. We have to be able to use it, because we  
3 have to be able to implement something, and I see the  
4 problem in implementation, which has been a problem for the  
5 agency in the past, so I think we have our work cut out for  
6 us. It is also somewhat a concern if you are going to stick  
7 with the term "negligible," and if those terms mean the same  
8 thing or different depending upon how we are able -- if we  
9 are able to come up a definition of minimal, but I think we  
10 have our work cut out for us.

11 MR. PIETRANGELO: Well, I will commit on our part  
12 to take a cut at it with our task force and working -- we  
13 have the working group in tomorrow morning, and the task  
14 force is a conference call away. It is certainly not  
15 impossible, I got some ideas just from listening to  
16 Commissioner Diaz earlier about how to define it. So it is  
17 obviously do-able.

18 Again, though, I think I explained before, we are  
19 probably going to stick with our guidance, but that doesn't  
20 meant that you can't go beyond that. Again, the reason we  
21 are sticking with the guidance is for the stability  
22 question more than anything, and the confidence one has in  
23 the change and complying with the rule. But we will commit  
24 to take a stab at defining minimal for probability.

25 CHAIRMAN JACKSON: Commissioner Diaz, let me just

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1 go down the line.

2 COMMISSIONER DIAZ: I guess just a simple comment.  
3 Looking at this objective, it remains to simplify and  
4 clarify rule to obtain stability, and I wonder if we really  
5 have been true to that in the last year. It seems to me  
6 like, by some reason or another, we have been adding degrees  
7 of freedom to everything that we try to do, and we had,  
8 instead of simplified a process, we made it more  
9 complicated.

10 Maybe this is the time in which to look back and  
11 say let's simplify it and try to obtain something that is  
12 workable. It doesn't have to be perfect.

13 MR. PIETRANGELO: Right.

14 COMMISSIONER DIAZ: It does not have to be  
15 perfect. Perfection -- it doesn't have to cover every  
16 angle. This is something that we have to understand, it is  
17 not possible to cover every angle whenever you do something.

18 And whoever reaches for that is asking for complication.  
19 And because there is always another angle, we need to come  
20 to the realization that this has to be a workable rule, and  
21 it has to be simple, and it has to be implementable. Thank  
22 you.

23 CHAIRMAN JACKSON: Commission McGaffigan.

24 COMMISSIONER MCGAFFIGAN: Could I clarify, on the  
25 eighth criterion, the method of analysis, your view is that

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1 that is covered by the definition of change, and you don't  
2 need an eighth criterion?

3 MR. PIETRANGELO: Well, that is one place it is  
4 covered. The second place, in the proposed rule under  
5 statement of considerations about the staff's expectations  
6 on use of methodology for these analyses. Thirdly, there's  
7 existing guidance in 96-07 that my understanding is the  
8 staff is quite comfortable with it, and we are even  
9 proposing to, now that the definition of change encompasses  
10 it, to enhance that portion of the guidance. And given all  
11 that, we wouldn't think this eighth criterion is necessary.

12 COMMISSIONER MCGAFFIGAN: The other question I  
13 asked, on the maintenance rule, what Rev. of NUMARC 90 -- is  
14 it three or four --

15 MR. PIETRANGELO: 301.

16 COMMISSIONER MCGAFFIGAN: 301. Are we on at the  
17 moment, without having changed the rule?

18 MR. PIETRANGELO: It is Rev. 2, Commissioner.

19 COMMISSIONER MCGAFFIGAN: Okay.

20 MR. PIETRANGELO: When we had the other briefing,  
21 we have had a lot of drafts of a particular section that  
22 deals with the assessment provision on that.

23 COMMISSIONER MCGAFFIGAN: So you are on Rev. 2,  
24 but you started with Rev. 0?

25 MR. PIETRANGELO: Yes.

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1 COMMISSIONER MCGAFFIGAN: So this is really the  
2 third. So there is some hope that if you didn't -- if we  
3 left minimal in, you would be able to, in a future revision,  
4 you say it was so small the first time --

5 MR. PIETRANGELO: Oh, absolutely.

6 COMMISSIONER MCGAFFIGAN: -- that you might be  
7 able to get --

8 MR. PIETRANGELO: These are living documents.

9 COMMISSIONER MCGAFFIGAN: -- something that the  
10 staff would be able to endorse. Meanwhile, most people  
11 would prudently stay probably with the so small.

12 MR. PIETRANGELO: As a matter of fact, let me just  
13 say we have set our workshop on licensing issues that  
14 include 50.59 and SAR and design basis for June 3rd and 4th  
15 in Philadelphia. One of the objectives of that workshop is  
16 to get early feedback on the implementation of NEI 98-03  
17 dealing with FSAR updates. We are going to collect the  
18 feedback we get at that workshop. We may be working on  
19 Revision 1 of that document very soon thereafter in tandem  
20 with the endorsement through the Reg. Guide.

21 So, yeah, if people find a problem with the  
22 document in the field, I think it is incumbent upon us, if  
23 it is significant, to revise the document.

24 COMMISSIONER MCGAFFIGAN: Thank you.

25 MR. PIETRANGELO: The same here.

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1 CHAIRMAN JACKSON: Commissioner Merrifield.

2 COMMISSIONER MERRIFIELD: Yes, I appreciate the  
3 kind offer to have your task force take a look at the  
4 definition of the word "minimal." We have been struggling  
5 with that. You know, I raise that issue only because, you  
6 know, if we are going to have that, you need to have, you  
7 know, work about defining it.

8 But I guess the other thing, if you could do this  
9 with your task force, you are going to go that direction, is  
10 also find out if people are going to use it, if there is an  
11 interest in having that change. I mean, again, I say this,  
12 you know, if it is something that people are going to use,  
13 it is worth going through the effort, but if we have a lot  
14 of effort, and in the end no one utilizes it, then it really  
15 -- you know, we have enough other things to do around here.

16 MR. PIETRANGELO: Okay.

17 CHAIRMAN JACKSON: I want to thank you for coming  
18 and kind of laying out clearly where you see the issues, as  
19 well as for the work that you have been doing with the  
20 staff. But I will tell you that, frankly, I am discouraged  
21 about the whole thing. It seems to me that, you know, we  
22 have been going around and around on it, and it is not clear  
23 to me, you know, even with the Commission, how much closure  
24 we are really going to come to. And I remain, you know,  
25 where I started, that if, you know, we didn't have the

96 1 wherewithal to risk-inform the rule in the first place, you 2 know, it causes us to be stuck in certain spots. 3 But whatever I decide is not going to  
be something 4 that -- I would not support something if I -- if the staff 5 fundamentally feels it is forcing us to gut our fundamental 6 regulatory  
responsibility, nor will I support something that 7 is essentially impossible to implement. And so that is 8 where I remain. Thank you. 9 [Whereupon, at  
4:15 p.m., the briefing was 10 concluded.] 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25