

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION
3 OFFICE OF THE SECRETARY

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5 BRIEFING ON STATUS OF MAINTENANCE RULE
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8 Nuclear Regulatory Commission
9 Commission Meeting Room
10 11555 Rockville Pike
11 Rockville, Maryland
12 Wednesday, May 5, 1999
13

14 The Commission met, pursuant to notice, at 2:44
15 p.m., the Honorable Shirley Jackson, Chairman of the
16 Commission, presiding.
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18 COMMISSIONERS PRESENT:

- 19 SHIRLEY JACKSON, Chairman
- 20 GRETA DICUS, Commissioner
- 21 NILS DIAZ, Commissioner
- 22 EDWARD MCGAFFIGAN, Commissioner
- 23 JEFFREY MERRIFIELD, Commissioner
- 24
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1 STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:

- 2 ANNETTE L. VIETTI-COOK, Secretary
- 3 KAREN CYR, Office of General Counsel
- 4 JOSEPH R. GRAY, Office of General Counsel
- 5 FRANK MIRAGLIA, Deputy EDO
- 6 GARY HOLAHAN, NRR
- 7 RICHARD CORREIA, NRR
- 8 WILLIAM KANE, NRR
- 9 THOMAS KING, RES
- 10 RALPH BEEDLE, NEI
- 11 HAROLD RAY, Southern California Edison Company
- 12 TONY PIETRANGELO, NEI
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1 P R O C E E D I N G S

2 CHAIRMAN JACKSON: Good afternoon. The Commission
3 will be briefed by the NRC Staff and the Nuclear Energy
4 Institute on proposed changes to 10 CFR 50.65, commonly
5 referred to as the maintenance rule.

6 As many of you know, for some time power reactor
7 licensees have shortened refueling outages by better
8 planning and increasing the amount of maintenance performed

9 on line. The existing rule tries to address the point
10 having to do with configuration of plant systems during
11 various modes, including maintenance on line, by
12 recommending that the given licensee perform assessments of
13 the total equipment out of service for maintenance at any
14 one time, with the objective of understanding the overall
15 effect on the performance of safety functions.

16 The Staff has proposed to modify the rule. The
17 proposed modification would require, as opposed to
18 recommend, that licensees perform assessments to control the
19 risks associated with the use of on-line maintenance, and
20 this proposal enjoyed the support of the Commission and the
21 nuclear power industry. Arriving at appropriate rule
22 language, however, has been difficult. Concerns have been
23 expressed regarding the definition of key terms, the degree
24 to which regulatory guidance could or should be used to
25 complete our approach to this subject, and the scope of

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1 equipment to be considered by assessments.

2 These concerns have been the subject of much
3 discussion between the NRC and its stakeholders. As the
4 Staff appears to be converging on language which they
5 believe is responsive to concerns expressed in this area by
6 a number of parties, now would seem to be an appropriate
7 time for the issue to be discussed in this forum.

8 This meeting is intended both to air the issue and
9 the proposed Staff language in public and to allow the
10 Commission to provide any feedback it desires to the Staff
11 as necessary.

12 As we consider the Staff proposal and the power
13 reactor industry perspectives on this subject, I believe we
14 should do so with the goal of achieving closure on this
15 question, which has occupied much of our attention for a
16 very long time.

17 To paraphrase a statement that some of my
18 colleagues have used at these meetings, some Commission
19 meetings, we should not allow the better to become the enemy
20 of the good.

21 With this background, let us proceed with the
22 business at hand. I understand that copies of the materials
23 being discussed are available at the entrances to the room,
24 and unless my colleagues have any opening comments they wish
25 to make, Mr. Miraglia, please proceed. I guess we wore Dr.

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1 Travers out this morning.

2 MR. MIRAGLIA: Yes, I am here pinch-hitting, and
3 he's --

4 CHAIRMAN JACKSON: We want to thank you for
5 hanging in with us here today.

6 MR. MIRAGLIA: Good afternoon, Madam Chairman and
7 Commissioners. As you have indicated, the Staff is here to
8 discuss proposed changes to 10 CFR 65, the maintenance rule.
9 At the table this afternoon is -- with me is Bill Kane,
10 Associate Director for Inspection and Programs in NRR; Gary
11 Holahan, the Director of the Division of Systems and Safety
12 Analysis, NRR; to my far right, Tom King, Director of
13 Division of Risk Analysis and Applications in Research; Rich
14 Correia, on my left, the Chief for the Reliability of
15 Maintenance Rule Section.

16 As you indicated, the maintenance rule went into
17 effect in July of 1996, and at that time it was the NRC's
18 expectations that Licensees would conduct assessments of

19 risk of performing maintenance activities, and that is
20 currently specified in Section (a)(3) of the rule. However,
21 that rule did not explicitly require the performance of
22 these assessments. As a result of this, the Staff proposed
23 the rulemaking change that was endorsed by the Commission in
24 an SRM of September 30th, and the Staff proposal was to
25 change that rule, would create a new section (a)(4) which

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1 would make it a regulatory requirement to perform such
2 assessments, to manage the risk for many proposed
3 maintenance activities.

4 In support of this briefing, as you summarized,
5 Madam Chairman, Dr. Travers on Friday, April 30th, sent a
6 package to the Commission that consisted of a number of
7 pieces of information. It was the package that the Staff,
8 rulemaking package that the Staff had prepared after that
9 point and discussed with ACRS and CRGR. It also transmitted
10 a rulemaking, a -- I'm sorry, the regulatory guide draft
11 that supports the (a)(4) revision, and it also included some
12 language limiting the scope for the pre-maintenance
13 assessments.

14 As you have indicated, Madam Chairman, this was an
15 issue that was commented on in the proposed rule, the scope
16 of these risk assessments.

17 With that introduction, I will turn the discussion
18 over to Bill Kane.

19 MR. KANE: One of the more consequential issues
20 regarding this (a)(4) change as the scope of the -- I'm
21 sorry -- scope of the systems, structures and components to
22 be included in the pre-maintenance assessments, both the NRC
23 and Licensees' focus has been on high safety-significant
24 systems, structures and components from the beginning.

25 However, once we initiated rulemaking to change

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1 the assessment recommendation to a requirement, the industry
2 began to feel that the NRC would require all in-scope
3 systems, structures and components to be considered in all
4 assessments. That has never been our intent or our
5 practice. The objective has been to provide a method and a
6 regulatory guide by which the Licensees could screen out
7 from future assessment consideration those
8 low-safety-significant structures, systems and components
9 that would contribute little to plant risk when out of
10 service for maintenance.

11 We now believe that a better course is to have the
12 rule contain some anchoring language that would reflect that
13 approach. However, this change has not -- this is a recent
14 change and has not yet been reviewed by ACRS or CRGR. They
15 reviewed the earlier version.

16 In discussions earlier today, we have been
17 communicating with ACRS, and CRGR, regarding this approach,
18 and in discussions earlier today, which Mr. Correia can
19 address, ACRS expressed some concerns with this approach and
20 may choose to lay those out in a letter.

21 We really hope that this briefing will facilitate
22 your review of the package. We can -- we looked at our
23 schedule and we can forward a revised package to you by May
24 17th. However, it is not likely that we will have completed
25 with discussions with ACRS at that time.

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1 For the details of what we are going to propose to
2 you, Richard Correia, who is the Chief of our Reliability
3 and Maintenance Section, will provide the presentation.

4 MR. CORREIA: Thank you, Bill.

5 Could I have slide 2, please.

6 Just as a way of background to take us from where
7 we've been to where we are, I would like to briefly go over
8 some key points in this rule change.

9 In SECY 97-055, in March of 1997, we described to
10 the Commission the problems we were having in inspections
11 with enforcing this part of the rule. We couldn't enforce
12 it. If we found an assessment that wasn't done, or it
13 wasn't adequate, we couldn't take enforcement actions.

14 Based on that, SECY, the Commission, asked the
15 Staff to consider clarifying (a)(3) and to provide examples
16 of weak programs found during the baseline inspection
17 program.

18 In SECY 97-173, we provided the Commission three
19 options to consider:

20 One, make no changes to the rule;

21 Two; change the "should" to a "shall";

22 And three, make comprehensive changes to the rule.

23 The Staff recommended option two.

24 Slide 3, please.

25 In the SRM that followed 97-173, the Commission

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1 directed us to prepare and issue for public comment the
2 proposed rule. We have the rule language here. Besides
3 changing "should" to "shall," we also included that these
4 assessments should include items such as corrective
5 maintenance and how the results of the assessment should be
6 used.

7 The existing language basically just says perform
8 an assessment; it doesn't say what to do with the results of
9 the assessment. This language further expanded that thought
10 to say that the assessment should be used -- shall be used,
11 excuse me, to ensure the plant is not placed in a
12 risk-significant configuration or configurations that would
13 degrade the performance of safety functions to an
14 unacceptable level.

15 COMMISSIONER DIAZ: Excuse me, Madam Chairman, let
16 me correct something for the record here.

17 CHAIRMAN JACKSON: Yes.

18 COMMISSIONER DIAZ: SRM 97-173 did not contain
19 this language. You know, the language, the SRM 97-173, the
20 language stopped at "is not placed in risk-significant
21 configurations," period. The rest of the phrase was added
22 later by the Staff. I just wanted the record to reflect
23 that.

24 MR. CORREIA: That's true. That's correct.

25 COMMISSIONER DIAZ: Okay. Thank you.

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1 MR. CORREIA: The thought behind that additional
2 phrase was to allow licensees to perform or use the result
3 of the assessments, without necessarily using PRAs. That
4 was the intent. Thank you.

5 Slide 4.

6 These are what we feel are the more significant
7 reasons for the change from "should" to "shall." First and
8 foremost, as the Chairman mentioned in her opening remarks,
9 the industry is increasing the amount and frequency of
10 maintenance performed at power. There has been a

11 significant change in this since the maintenance rule was
12 written, and we feel that these assessments are very, very
13 important for plant safety.

14 We also found during the baseline inspections that
15 several Licensees had problems with the assessments. We
16 found in some cases assessments were not performed; in other
17 cases they were performed, but did not include all the
18 systems that might have been out of service at the same
19 time.

20 Also technical specifications generally were not
21 intended to address removal of multiple equipment out of
22 service simultaneously. They looked basically at one or two
23 systems at a time with a reasonable amount of time to repair
24 and restore the equipment to service.

25 As I mentioned earlier, the current assessment in

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1 the rule is a recommendation, not a requirement, therefore
2 it is not enforceable. And one other change that we are
3 making to the rule by (a)(4) is to clarify that the rule
4 requirements apply during normal operating and shutdown
5 conditions.

6 CHAIRMAN JACKSON: Let me ask you a question.

7 MR. CORREIA: Yes.

8 CHAIRMAN JACKSON: You know, reading your first
9 and third bullets, to what extent does a typical plant
10 employing a rolling maintenance schedule differ from the
11 assumptions the NRC Staff made when either licensing the
12 facility or when this rule was initially promulgated?

13 MR. CORREIA: Well, they always have to comply
14 with the technical specifications. This rule would not
15 allow them to deviate from that, certainly. And any other
16 license conditions that they would have.

17 CHAIRMAN JACKSON: How would the risk change if a
18 Licensee entered all the tech spec action statements they
19 possibly could?

20 MR. HOLAHAN: Could I try that?

21 MR. CORREIA: Sure.

22 MR. HOLAHAN: I think when the technical
23 specifications were written, there really was sort of an
24 inherent assumption that this was sort of a one piece of
25 equipment at a time, and I think the risk assessments aren't

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1 normally done to the requirements; they are done to your
2 best judgment of how plants are really operated. But I
3 think you could say if you took all the equipment out of
4 service that tech specs would allow, it would basically
5 leave the plant so that any event would not have single
6 failure protection. Usually the redundant systems provide
7 at least a factor of 10 or 20 of increased reliability of
8 mitigation. So you could easily expect risks to increase by
9 10 times, 20 times, if plants are actually run that way.

10 COMMISSIONER MERRIFIELD: Madam Chairman?

11 CHAIRMAN JACKSON: Please.

12 COMMISSIONER MERRIFIELD: In reviewing for this
13 meeting, I was going over the CRGR comments and
14 recommendations from the April 27, 1999 meeting, and I am
15 wondering if you could address a significant comment of
16 this, number two, stating that the Staff is not providing a
17 defensible rationale for its position that the rule change
18 will provide a "substantial increase in protection of public
19 health and safety."

20 MR. CORREIA: My view was that the reg analysis --
21 at least it was clear to me and the Staff, that it was
22 inherent in the reg analysis. I think what happened was
23 there wasn't a clear statement to that fact. We have now
24 since changed the reg analysis to reflect that it does
25 indeed -- is a necessary change.

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1 MR. MIRAGLIA: Commissioner Merrifield, if I might
2 amplify, I believe the thought process that entered into
3 that comment is that the CRGR members felt that there was an
4 argument to be made and a story to be told, but it wasn't
5 clearly articulated within the reg analysis that was
6 provided to the CRGR, so it was a recommendation that the
7 Staff look at that and clearly articulate those points.
8 They felt that the package did not do that. And I think
9 that's what --

10 COMMISSIONER MERRIFIELD: I guess it just raises
11 the connected issue. You know, we have been spending a lot
12 of time of our new reactor oversight program and one of the
13 things that we have been seeing is that we have a mature
14 industry that has a number of performance indicators that
15 demonstrates it is clearly running a lot more safely than it
16 used to, and has a greater operational performance than it
17 did over a decade or so. And so here we are, on the one
18 hand, saying that we have an issue which will probably
19 substantially increase the safety, yet we have said in other
20 contexts that we think, you know, important improvements in
21 safety have already occurred.

22 Given this differentiation, I wonder if you could
23 provide me a little bit more clarification of why you
24 believe this is important for protecting public health and
25 safety.

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1 MR. MIRAGLIA: I think it would go to some
2 examples that there are risk configurations out there,
3 particularly in combination, that can put the plants at
4 risk.

5 One of the issues that we haven't addressed well
6 are particularly issues with plants in shutdown and the new
7 more on-line maintenance, which is a different approach from
8 the initial licensing. As Mr. Holahan has indicated, the
9 tech specs never contemplated large amounts or pieces of
10 equipment all out at the same time and that kind of thing.
11 So there is that evolution.

12 I don't know if Rich might have some particular
13 examples that could be noted.

14 MR. CORREIA: Well, I can only reflect on what we
15 saw during the baseline inspections. For example, one of
16 the assessment tools at one facility only considered 12 out
17 of 44 high safety-significant SSCs. So if anything was
18 taken, it wasn't on that metric out of service and the risk
19 was unknown, and they could have been in a much higher risk
20 situation than they thought they were.

21 COMMISSIONER DIAZ: If you would have considered
22 all 44 high safety-significant, would you have been
23 satisfied?

24 MR. CORREIA: Certainly our comfort level would
25 have been up.

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1 COMMISSIONER DIAZ: No, no, that is not the
2 question. Would you have been satisfied, if 44 out of 44

3 high safety-significant would have been considered? Would
4 that have been adequate protection of health and safety?

5 MR. CORREIA: No, because there could be some low
6 safety-significant SSCs that in combination with some high
7 could change the risk significance of a configuration, and
8 these are typically support systems, systems that supply a
9 supporting function to the main mitigating system, for
10 example.

11 COMMISSIONER DIAZ: By a factor of 10? The factor
12 of 2? By 10 percent? I mean, of course, the Staff is doing
13 the analysis to justify this position, as you said. As
14 Commissioner Merrifield said, you have now further analysis
15 that justifies this position, so a factor of 2? A factor of
16 10?

17 CHAIRMAN JACKSON: Is it a matter of the plant?

18 MR. CORREIA: It's a matter of the plant and the
19 configuration, yes.

20 COMMISSIONER DIAZ: So it's a matter of some
21 specific plants being out of norm, and we are going to
22 legislate all plants because one is out of norm? I mean I'm
23 just asking. You say you have reviewed the regulatory
24 analysis, and now you have this justification. I just want
25 to make sure that the justification is obvious and plain,

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1 submitted to the Commission.

2 CHAIRMAN JACKSON: Gary, do you have any comments
3 you want to make?

4 MR. HOLAHAN: Well, if I remember what was in the
5 reg analysis, and I think we commented on it quite a long
6 time ago, if you remember the Commission guidance on how to
7 do these regulatory analyses and the regulatory analysis
8 guidelines addresses what credit ought to be given for
9 voluntary actions on the part of the Licensees in that
10 analysis, and there's some guidelines as to whether programs
11 ought to be given credit versus hardware and structures, and
12 the Commission guidance is not to give credit for voluntary
13 actions when you are making judgments about whether
14 something should be required or not.

15 After all, if you assume that Licensees are
16 already meeting the rule, then having the rule, of course,
17 has no value because it would be no difference. So in
18 effect what you are judging is the value of a Licensee not
19 continuing the voluntary action, but going back to the
20 minimum requirements as the regulations would require, and I
21 think there is a substantial value to that. I think that is
22 part of what has happened in that analysis, although I
23 haven't seen it for quite a while, I have to say.

24 COMMISSIONER DIAZ: Therefore, you are saying that
25 unless there's something we don't know, that nuclear power

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1 plants today, if they do their normal things and maintain
2 voluntary actions that are in the configuration risk
3 management, then there will be not much difference; is that
4 what you are saying?

5 MR. HOLAHAN: I think what I was saying is, of
6 course, if Licensees are already doing exactly what this
7 rule would accomplish, then there is no value in having the
8 rule. I mean the actual practical implementation at the
9 plant --

10 COMMISSIONER McGAFFIGAN: But I don't think that's
11 what the Staff's inspection findings show. I remember the

12 Quad Cities event, it was Diablo Canyon -- I mean just in
13 the last six months, there have been -- I don't know whether
14 they would get there the Morris engine and the new
15 assessment process and be one of the Big 10 findings for the
16 year, but the Staff inspection findings in this case are --
17 they are finding people are putting their plants in
18 risk-significant configurations.

19 MR. HOLAHAN: And in fact, the value of the rule
20 is being able to address those situations.

21 COMMISSIONER DIAZ: I am happy to see Commissioner
22 McGaffigan using the term risk-significant configurations.
23 That means that there is some leeway in here. Okay. Thank
24 you.

25 CHAIRMAN JACKSON: Also it seems that there is the

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1 point that seems to underlie what you are talking about, but
2 you don't ever talk about it that explicitly, and it really
3 has to do with some concern for cumulative risk. Is that a
4 fact?

5 MR. CORREIA: Certainly any time a plant places
6 itself in a configuration, there is some risk associated
7 with that, and it would certainly contribute to a periodic
8 increase in risk, but I think --

9 MR. HOLAHAN: I think the cumulative risk issue is
10 better covered in the other parts of the maintenance rule
11 which call for a periodic assessment of balancing, you know,
12 unavailability --

13 MR. MIRAGLIA: Unavailability.

14 MR. HOLAHAN: -- and maintenance activities. I
15 think this part of the rule is really a
16 configuration-by-configuration situation, you know. Is the
17 situation that you plan to go in one that is, you know,
18 acceptable from a risk point of view. Obviously if each and
19 every one is well planned and is acceptable, then I think
20 the total comes out acceptable. And one ought to expect the
21 assessments done once every 18 months or whatever, you know,
22 to reflect all those good judgments made and naturally the
23 conclusions ought to be acceptable.

24 MR. MIRAGLIA: The other key part is to assess and
25 manage; in other words, understand where you are putting the

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1 plant and do you have compensatory measures or other
2 measures in place to understand the significance of the
3 configuration you are in for the duration of the period that
4 you are in.

5 COMMISSIONER MCGAFFIGAN: Madam Chairman, you
6 know, part of me wishes that we had just changed "should" to
7 "shall" on the spot when Commissioner Merrifield's
8 predecessor, Commissioner Rogers, gave a speech to us all
9 early in my tenure here about how fundamental it was with
10 the increased amount of on-line maintenance that was going
11 on and the inspection findings that they were briefing us on
12 in early '97. I remember him saying this is fundamental.

13 CHAIRMAN JACKSON: We "should" have gone to
14 "shall."

15 [Laughter.]

16 COMMISSIONER MCGAFFIGAN: I asked Mr. Beedle, Mr.
17 Beedle said we're all for it, and I honestly at that point
18 would have endorsed NUMARC, encouraged the Staff to NUMARC
19 93.01, Rev. 2, just maybe with a couple of "shoulds" changed
20 to "shalls" and you'd be there. Because it would be a
21 pretty darn good rule, and obviously there is a lot of water

22 over the dam since, but this reg guide which uses "should,"
23 doesn't use "shall," should be assessed for its impact on
24 key plant safety functions, et cetera, isn't a bad reg guide
25 with the few "shoulds" changed "shalls," but we are -- I

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1 guess we are now going to try to improve.

2 COMMISSIONER DIAZ: That was two years ago. A lot
3 of things have happened since then, and I'm sure the staff
4 and the industry are both more knowledgeable now about this
5 issue. Is that a yes? You are more knowledgeable today
6 about the issue than you were two years ago? You have
7 further risk insight on the issue?

8 MR. HOLAHAN: We have certainly thought about it
9 more. I'm not going to --

10 [Laughter.]

11 COMMISSIONER DIAZ: Okay. I can buy that.

12 CHAIRMAN JACKSON: Why don't you just kind of give
13 a plain language statement of your bottom line, so we are
14 all normalized to the same point. You know, not
15 temporizing, you know, not looking at our body language;
16 just kind of give a plain language bottom line statement of
17 where you are, so we know what page we're on.

18 MR. MIRAGLIA: I think I'll give a try, and then
19 I'll put my foot in Rich's mouth, and he can correct me.

20 I think what we have -- you know, our initial
21 approach, Madam Chairman, was to say that we can deal with
22 this issue and addressing the concerns relative to the scope
23 of these assessments in terms of regulatory guidance.

24 Given the amount of discourse and comment that we
25 had on the proposed rule, given the dialogue that we have

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1 had with various stakeholders, we now believe that the rule
2 should have some sort of language to -- within the context
3 of the rule to address the scope of the rule, and that is in
4 some of the proposed language that Rich is going to discuss
5 on a later slide, and that's a very brief summary statement,
6 but Rich, if you want to add to that.

7 MR. CORREIA: No, that's true. We recognize that
8 not all systems in the scope of the rule contribute
9 significantly to outage configurations. Our initial
10 thought, our very recent thought, was let the regulatory
11 guide describe a methodology to limit the scope of these
12 assessments as the Licensee would assess and determine that
13 certain systems were not that important in the
14 configuration, they could stop doing the assessments and
15 focus on those that were most important. I believe that is
16 where we are today, and the question is do we put that
17 language in the rule, or do we let the reg guide speak to
18 it.

19 CHAIRMAN JACKSON: Do you have a plain language
20 statement?

21 MR. HOLAHAN: I'll give it a try.

22 I'd say that we know from experience and risk
23 analyses that controlling plant configurations is important.
24 It is an important element to risk. It is not unusual in a
25 risk analysis to find out that two-thirds or so of the risk

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1 comes from, you know, unusual plant configurations, not when
2 an event occurs and everything started out in service. So
3 we know that it is important. But we also know that not

4 every piece of equipment is so important that it needs to be
5 controlled. And so it seems to that there is some middle
6 ground in where the most important equipment should have a
7 requirement in place that says, you know, for this sort of
8 equipment, Licensees should be required to think carefully
9 when they are taking it out of service and look at the
10 implications of it. And that's what we are trying to get to
11 in this rule.

12 CHAIRMAN JACKSON: So that means you need to bound
13 the SSCs?

14 MR. HOLAHAN: You need to bound it.

15 CHAIRMAN JACKSON: Okay.

16 MR. HOLAHAN: Because not all of them are
17 important, and not all of them are unimportant.

18 CHAIRMAN JACKSON: But given what Mr. Correia said
19 about -- you're not related to the sax player. No. Anyway
20 --

21 [Laughter.]

22 CHAIRMAN JACKSON: I just thought about that.

23 MR. CORREIA: I do have a nickname, though.

24 CHAIRMAN JACKSON: Given what you said about the
25 fact that some things that you normally wouldn't -- some

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1 systems that you normally wouldn't think of as being
2 safety-significant could impact those that you do, what is
3 the fundamental statement about how you bound the scope?
4 How do you bound it? I mean isn't that what all of this
5 discussion is about?

6 MR. HOLAHAN: I'll try it. We've sort of jumped
7 way to the end.

8 CHAIRMAN JACKSON: Well, I'd like to get to the
9 bottom line here.

10 MR. HOLAHAN: It seems to me that if we ask
11 ourselves, you know, has this problem been solved before,
12 don't people think about these things, you know, every
13 analyst that does a risk assessment is in fact picking
14 systems and components to model because they are concerned
15 that these pieces of equipment, taken in combination with
16 other pieces of equipment and other failures, could lead to
17 unacceptable consequences. That is the basic logical
18 process for deciding what should be modeled in the PRA and
19 what should be left out. Things that even in combination
20 with other things aren't going to cause any problems,
21 they're not modeled, they're just left out. It's only a
22 fraction of the plant that's modeled in the PRA.

23 In that sense, at least from a starting point of
24 view, we're saying things that are modeled in the PRA are
25 good candidates for those things, you know, that should be

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1 looked at for combinations that might be risk-significant
2 for configuration control. That's the sort of logic that
3 this sort of limiting process leads us to.

4 COMMISSIONER MCGAFFIGAN: Madam Chairman, we
5 should almost have different paragraphs from the reg guide
6 and whatever in front of us, but the -- what the -- the reg
7 guide as it existed when they sent it to us on last Friday,
8 the scope paragraph says, "The scope of SSCs to be included
9 in the assessments of maintenance activities may be limited
10 to those SSCs individually or in combination that can be
11 shown to have a significant effect on the performance of key
12 plant safety functions. The focus of the assessment should
13 be on the SSCs modeled in the PRA," as Gary just said, "in

14 addition to all SSCs considered to be risk-significant by
15 the Licensee's maintenance rule expert panel."

16 That -- is that where the Staff is? I mean that's
17 what you are trying to get at, are the SSCs that are modeled
18 in the PRA plus the SSCs that are considered
19 risk-significant by the maintenance rule expert panel, and
20 then you are going to look at whatever number that is and
21 look at them individually and combination? That's what the
22 guide said as of Friday. Is that where we are trying to get
23 to?

24 MR. HOLAHAN: I think that's what we're -- I think
25 I'm saying too many things that Rich ought to be saying. I

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1 think that's where we want to get to, and we are trying to
2 find words that would go in the rule and proper words that
3 would be in the reg guide that would lead us there.

4 I think it's kind of early, you know, we haven't
5 had this discussion with ACRS and with other stakeholders,
6 but --

7 CHAIRMAN JACKSON: Repeat what you just said.

8 COMMISSIONER MCGAFFIGAN: The words that are in
9 the reg guide? I'm looking at page 3 in the middle
10 paragraph.

11 CHAIRMAN JACKSON: I don't have 3.

12 COMMISSIONER DIAZ: And there are three
13 requirements in there, not one, but there's three there.
14 The three sequential requirements. The scope to be included
15 may be limited -- may be limited -- to those SSCs
16 individually or in combination that can be shown to have a
17 significant effect on the performance of key plant safety
18 functions. That gives you one thing.

19 The other is the focus of the assessment. This is
20 an additional focus, it is the second tier, no? No? Well,
21 it can be interpreted.

22 COMMISSIONER MCGAFFIGAN: I think what my
23 interpretation of the second tier is how to do the first.
24 And so I don't think it says -- the second -- and maybe
25 that's English. I mean we're always --

26

1 COMMISSIONER DIAZ: No, that's right, and that's
2 why the problem is.

3 CHAIRMAN JACKSON: Well, doesn't the last sentence
4 or so give you your escape clause? I mean the real point --
5 what I was going to argue is this:

6 You know, we need some breakthrough thinking here.
7 I mean I'm aware of where NEI is, I'm aware of where the
8 Staff is, I'm aware of where Commissioner Diaz is, I'm aware
9 of where I am. I'm not much aware of anything else.

10 The issue becomes, for Licensees, is an argument
11 I'm sure they would make, that why should they have to do
12 certain broad scope assessments each and every time they get
13 ready to perform maintenance activities?

14 Our concern, or your concern is, you know, they
15 are going to basically leave something out if they do a kind
16 of a one at a time, at a time, at a time kind of approach.
17 But it strikes me that there is an opportunity to do an
18 assessment with some periodicity. Now this says once. But
19 with some periodicity that is not necessarily every time
20 they are going to take equipment out of service, but
21 something that would be on some time line that might capture
22 any significant changes that have occurred to the plant. So

23 you have a periodic kind of update of the assessment, but
24 then once that's done, so that they can have some definition
25 to the first sentence or two in here, then that's what they

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1 focus on doing an assessment.
2 I mean why can't we go there and just kind of end
3 this debate? I mean talk to me.
4 COMMISSIONER DIAZ: How much time do I have?
5 CHAIRMAN JACKSON: Thirty seconds.
6 [Laughter.]
7 COMMISSIONER DIAZ: That's what I was afraid of.
8 I think the Chairman has discussed, you know,
9 fundamentally what the crux of the matter is. And if I can
10 take more than 30 seconds --
11 CHAIRMAN JACKSON: Of course. Of course.
12 COMMISSIONER DIAZ: -- let me just back up and ask
13 a series of questions.
14 Have we before considered what are the
15 risk-significant structures, systems or components? Is that
16 something that we have done?
17 MR. HOLAHAN: Yes.
18 COMMISSIONER DIAZ: Okay. I mean the fact we use
19 something like that, even if it was not PRA, when we did
20 environmental qualifications in a certain way, it was not
21 PRA, but it was kind of a risk insight which we used to
22 determine what equipment had to be environmentally
23 qualified, and you know, it was a big rule and there were a
24 lot of problems. We kind of, you know, turned up the
25 knowledge knob and the station blackout, when we did a

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1 station blackout, did we select it, some structures, systems
2 and components that we thought were high safety
3 significance, that thou shalt have those, and we did.
4 MR. HOLAHAN: Yes.
5 COMMISSIONER DIAZ: Correct. All right. Thank
6 you.
7 And then we did ATWS, we also did a selection and
8 said, you know, we are going to classify this structures,
9 systems and components. I think the bottom line is that
10 presently, 1999, we have the capability to define, okay,
11 once and for all, or maybe for the next three years, okay,
12 what risk-significant structures, systems and components
13 are, and if not, it is impossible to continue, okay, to
14 risk-inform the Nuclear Regulatory Commission infrastructure
15 because we are missing the central part of where we can find
16 every cornerstone that will deal with structures, systems
17 and components. And I mean if we cannot do it in a more
18 restricted part which is an assessment, okay, then how can
19 we have an inspection, you know, an assessment, and
20 oversight that is risk-informed, when the inspector is not
21 going to know what structures, systems or components are
22 really the ones that they need to do?
23 So the bottom line is that the maintenance rule
24 provides a vehicle, okay, to get into the necessary steps to
25 clarify what can and should be risk-informed. And the first

29

1 part of it is in an assessment mode, not even during mode,
2 can we define what that border is, what the boundaries are?
3 And I believe that the answer, you know, which will be
4 coming, I'm not going to presume, but there is a sequence in
5 here, and the sequence doesn't end in the other necessary

6 steps, can we define what risk structures, systems and
7 components are risk-significant? And if we can define
8 those, can we then put them in the context of an assessment,
9 okay, mode for the maintenance rule so it can serve as a
10 base for when supposedly some time we are going to
11 risk-inform the rest of the rule and might do other
12 risk-informed things, can we do it in a manner that is
13 consistent with it? We have already defined
14 risk-significant structures, systems and components with
15 regard to technical specifications. We took risk and we
16 stuck it out there, okay, and so the question is, can we
17 come with, as the Chairman said, a boundary just for the
18 assessment?

19 We voted, I voted to have a "should" changed to a
20 "shall" almost two years ago, okay. At the time it was a
21 good idea. Right now this time has almost expired, because
22 other issues are catching up to it. But I am still saying
23 it sounds like a good idea -- I'm sorry, let me finish -- it
24 sounds like a good idea --

25 CHAIRMAN JACKSON: Must be a lawyer.

30

1 COMMISSIONER DIAZ: Not really.

2 COMMISSIONER MCGAFFIGAN: He took that course we
3 were talking about this morning.

4 [Laughter.]

5 COMMISSIONER DIAZ: I was very quiet this morning.
6 I'm using all my time from yesterday and this morning.

7 [Laughter.]

8 COMMISSIONER DIAZ: So, you know, it boils down to
9 one simple question: Can we define what risk-significant
10 systems, structures or components for the scope of the
11 assessment in a manner that serves this country well, in a
12 manner that people can work with it and can serve as a
13 cornerstone for the future?

14 CHAIRMAN JACKSON: And I think the answer is yes.

15 COMMISSIONER MCGAFFIGAN: Madam Chairman, if I
16 could just -- to some degree, I'm going to try to turn the
17 table on Commissioner Diaz, and in this paragraph, why isn't
18 this a risk-informed definition -- I mean they are saying
19 here's the things that are modeled in the SSC, in the PRA,
20 which I assume are the more risk-significant systems, and in
21 addition consider the things that may be risk-significant
22 based on Licensee's maintenance rule expert panel, which I
23 assume brings in operating experience and some deterministic
24 engineering judgment, and so why isn't that paragraph as it
25 stands --

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1 COMMISSIONER DIAZ: Commissioner McGaffigan, I am
2 surprised. You said this morning you would do everything as
3 an analytical thing. You obviously are doing this -- now
4 I'm not saying like a lawyer --

5 [Laughter.]

6 COMMISSIONER MERRIFIELD: I'm not going to get
7 drawn into this discussion.

8 COMMISSIONER MCGAFFIGAN: But why is it not --

9 COMMISSIONER DIAZ: Because it is not bound.
10 Because it is not bound. It is unbound. It is unbound and
11 it can't -- it is unbound. If you put it on the street as
12 unbound, and further, you know, if we -- as we walk away
13 from this, you are going to find that people are going to
14 use it in different terms. If it is that well known, okay,

15 well, then define it further and put it in the body of the
16 --

17 CHAIRMAN JACKSON: Why doesn't the balance of the
18 paragraph help you to bound it?

19 COMMISSIONER DIAZ: The balance of the paragraph
20 says, you know -- I mean Mr. Holahan says we can define -- a
21 couple of times when people talked about high, and then we
22 get into low, the low in here, you know you said first is
23 the expert assessment and the people that assess
24 risk-significant configuration. It doesn't say high or say
25 low.

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1 The second part comes and talks about mixing low
2 risks which can become high. So what you are doing is you
3 are now opening, you know, something that is not bound. Can
4 we define something that is better bound?

5 MR. MIRAGLIA: And the Staff has addressed that
6 issue, I believe, in 98-300 in saying that there are many
7 places within the rules and regulations where we have used
8 structures, systems and components, and that how we analyze
9 that needs to be looked in a holistic kind of way in 98-300.

10 So I think with the thrust of your question
11 before, is that that was the option that the Staff proposed
12 to the Commission in 98-300, that that takes careful
13 consideration, because the answer may not be exactly the
14 same each time because we answered that question in
15 different contexts, just as you said, and at different
16 points in time. And so what we have here is a definition to
17 recognize in response to the concerns expressed relative to
18 the rule on industry is that we want some language in the
19 rule to recognize that the scope of the assessment is
20 different from the scope of the rule. And so that's what
21 the language that the Staff has proposed in the modified
22 language that's on viewgraph 8, is attempting to do. But
23 you do need to -- that's a bridge, a bridge to get to the
24 other issues, you need the companion reg guide. So what it
25 is is recognition in rule space that set the principle and

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1 the predicate of a basic principle that the rule should
2 recognize that the scope of the assessments being discussed
3 in the context of (a)(3) of the rule is different than
4 perhaps the whole scope of the maintenance rule.

5 CHAIRMAN JACKSON: Scope of (a)(4)?

6 MR. MIRAGLIA: Yes. I'm sorry. And this is
7 exactly the points that were made at some of the stakeholder
8 meetings, that some rule language needs to be there to set
9 framework and principles, but maybe not all of the details.
10 And that's kind of where the Staff is with respect to that.
11 And I guess that's my last attempt at plain English.

12 CHAIRMAN JACKSON: It strikes me that, again I'm
13 going to repeat, you want to be sure that whatever the
14 quote, unquote, scope is of the assessments, that they are
15 robust enough. The Licensees don't want to have to do some
16 full scope assessment each time they get ready to do
17 maintenance.

18 There probably is an argument that can be made
19 that you don't need to do it every time you do maintenance.
20 So that's one end of the -- you know, doing it every time.
21 The other end is you either don't do it, or you do it one
22 time for all time. And the answer is probably somewhere in
23 between, and I don't know what that in between is, but it
24 strikes me that we ought to be able to come to some closure.

25 And I am saying this because I know the industry panel is

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1 sitting out there waiting. And we need to get to this. I
2 mean we need to bound it, we need to understand the
3 regulators' concern, understand those who have to implement
4 its concern, and I guess I'm -- as I look at page 3 of this
5 draft reg guide again, you know, this paragraph that, you
6 know, we were focusing on, I am just trying to understand
7 why we can't come to some closure around this. I mean why
8 do we just go on and on? I mean let's pick the middle
9 ground here which makes sense and move along.

10 Yes?

11 COMMISSIONER MCGAFFIGAN: Are you all going to
12 show us wherever you are as of this moment?

13 CHAIRMAN JACKSON: Yes, show us where you are.

14 COMMISSIONER MCGAFFIGAN: Whatever in the language
15 to --

16 MR. KANE: I guess there are two things we want to
17 focus on. One is the linking language that you will get to,
18 and then the schedule for the review of the regulatory
19 guide.

20 CHAIRMAN JACKSON: Okay. I didn't mean to preempt
21 you, even though we obviously did.

22 MR. CORREIA: Slide 8 has very recently developed;
23 the last sentence in this modified provision was not
24 included in what we presented to ACRS and CRGR, but as Frank
25 explained, would serve as a link between the rule and the

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1 need for a limited scope to a regulatory guide that would
2 develop the language further and define what that scope
3 would be, or the process to determine the scope for the
4 assessments.

5 What we have on page -- slide 9, please.

6 COMMISSIONER MERRIFIELD: Chairman, before we go
7 there. I'm sorry, I know you are trying to pick up some
8 speed, but Commissioners have to keep you from doing that.

9 The slide indicates that this was developed within
10 the last few days, and I am wondering, given that, I presume
11 that there hasn't been any review of this by ACRS? Have you
12 had any kind of external review of this particular language?

13 MR. KANE: Rich, you -- we had some, as I
14 explained earlier, this language was developed recently and
15 before we came here, we wanted to touch base at least with
16 ACRS and with CRGR, and while I was down here this morning,
17 Rich did talk to -- could you give us the benefit of those
18 discussions?

19 MR. CORREIA: Yes. A brief discussion when they
20 reviewed the language, the fundamental question was, how
21 will this language capture the combinations of SSCs that we
22 are concerned about that would give you a risk-significant
23 configuration? Previously the language that we showed the
24 ACRS was full scope of the rule, most of the focus on the
25 high safety-significant and the combinations of low that

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1 could give you a risk-significant configuration, and they --

2 CHAIRMAN JACKSON: That's in this reg guide.

3 MR. CORREIA: Right, which is what we presented to
4 ACRS.

5 COMMISSIONER MCGAFFIGAN: Madam Chairman, I
6 honestly think that this is where I think Commissioner Diaz

7 and I may differ. These words that are in here I think are
8 compatible with the paragraph we have been focused on.
9 Risk-informed evaluation process is shown. We say one
10 acceptable way to do the risk-informed evaluation process is
11 to look at the SSCs mode in the PRA, look at the things that
12 are risk-significant, do a one-time assessment. So I -- and
13 that may be, you know, where the difference is is this
14 language is largely consistent with something that, at least
15 the first paragraph, of something NEI sent in in April as a
16 suggestion. It's almost verbatim, the scope sentence.

17 But the question is, does this link to this? In
18 my view, it would, but maybe in your view, it would not.
19 That's why I asked the question earlier.

20 COMMISSIONER DIAZ: It links. I'm not saying it
21 doesn't link. It is the boundary that is not correct.

22 COMMISSIONER MCGAFFIGAN: Let me just quote Gary
23 Holahan, you know, a few moments ago --

24 COMMISSIONER MERRIFIELD: At some point, I'd like
25 to get my question --

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1 COMMISSIONER MCGAFFIGAN: Oh, I'm sorry.

2 COMMISSIONER MERRIFIELD: And I don't mean to
3 interrupt, but he didn't fully answer my question, so I
4 wanted --

5 COMMISSIONER MCGAFFIGAN: Go right ahead.

6 CHAIRMAN JACKSON: Why don't you get your question
7 asked and you make your statement.

8 COMMISSIONER MERRIFIELD: You were in the midst of
9 answering my question. You answered part of my question,
10 and the rest, depending upon how you answered it --

11 MR. CORREIA: The ACRS would like to understand
12 better how this language equates to the discussion we had
13 with them last month. How does this capture the
14 configurations that we are most concerned with. And the
15 answer is the regulatory guidance would develop that process
16 on how this would be done. But they weren't comfortable
17 with this language as doing as we portrayed with them, to
18 them last month. So they may write a letter expressing
19 their views that perhaps the whole scope of the rule needs
20 to be evaluated, and maybe this one-time assessment is an
21 adequate process to eliminate some SSCs for future
22 assessments.

23 MR. MIRAGLIA: But in fairness to the ACRS, it
24 was, you know, it was with the subcommittee in a brief
25 discussion on some recently developed words.

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1 COMMISSIONER MERRIFIELD: I guess that does raise
2 the question. Commissioner McGaffigan and I, having worked
3 on the Hill, know how this goes. You get to the deadline
4 and sometimes you come up with some language that really
5 hits the mark and sometimes you don't. And it just does
6 raise an issue whether, you know, whether we go with this
7 language or we step back a little bit and, you know, rather
8 than just focus on this one piece, whether you do it in more
9 of a comprehensive integrated rulemaking package. I don't
10 know if you've got any thoughts about that.

11 CHAIRMAN JACKSON: If you do that, and you do it
12 in a comprehensive way, you're not going to get to it for
13 some long time down the pike, and I think there's a need
14 with "should" to "shall" to move it forward and to provide a
15 bridge tot he future.

16 COMMISSIONER MCGAFFIGAN: Could I ask a question

17 that I think is still on this point, that the link of this
18 sentence to this reg guidance isn't self-obvious.
19 Commissioner Diaz is worried that the link of the language
20 is not self-obvious. He'd like it linked to something
21 that's less broad. Could you guys think about the first
22 sentence? I mean the scope of SSCs to be included, are
23 those individually or in -- may be limited to those
24 individually or in combination that could be shown to have a
25 significant effect on the performance of key plant safety

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1 functions? Use that as a linking sentence? Or -- I mean I
2 don't know what the --

3 COMMISSIONER DIAZ: Okay, let me take a stab at
4 this.

5 COMMISSIONER MCGAFFIGAN: On page 8 of the reg
6 guide?

7 COMMISSIONER DIAZ: You know, the first thing that
8 I am going to take up -- and it's a quick -- and this is not
9 important, but in that first sentence in that paragraph, the
10 Licensee shall assess and manage, okay, we hardly ever use
11 the word manage. We use the word control, okay, like Dr.
12 Holahan was using, control is an engineering --

13 COMMISSIONER MCGAFFIGAN: That's what they use in
14 NUMARC 93-01, Rev. 2.

15 COMMISSIONER DIAZ: Control is -- it indicates
16 bounds, okay, it indicates that you have kind of a risk
17 setpoint, and you are going to, you know, have a little dead
18 band, a band is something we're going to accept, some
19 movement, but that's minor.

20 Let me go to the second sentence. The scope of
21 the assessment may be limited to structures, systems or
22 components that a risk-informed evaluation process has shown
23 to be significant for public health and safety.

24 I see this as a way of getting around, frankly, I
25 mean my probably wrong opinion, of dealing with can we

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1 define a scope for the assessment on the maintenance rule,
2 okay?

3 In other words, a process now is going to be
4 defined in this guidance, and that might be okay, you know,
5 if the guidance is precise and we are not going to change it
6 and going to interpret it and it's going to be subjective,
7 and all of those things. But in reality we know that you
8 can take any plant, not a nuclear power plant, but any plant
9 in the world, and you can take enough individual failures or
10 enough individual low risk components out, and if you want
11 to, you can make anything fail. There is absolutely no
12 doubt about it. So where do you bound it? Where is the
13 bound that people can use this as an effective tool that
14 will satisfy our concern for adequate protection of health
15 and safety? Where are the bounds in the low risk, you know,
16 individual systems, structures and components? Where do we
17 put those things together? I said that we have used these
18 bounds before. We have used them to establish, you know,
19 when Chairman Jackson pushed for the PRA, there was a
20 boundary in that what we can do with that. This is a little
21 wider boundary because this is not only PRA, this might be
22 deterministic method, somebody might do a heat balance, they
23 might say this pump is working at so many gallons per
24 minute, and people do this day in and day out. And yes,
25 there has been, quote, you know, things out of

1 configuration, but did we look at consequences? They're
2 zero, okay? So I mean you have a zero consequence.

3 So that provides, you know, a bound. What is the
4 problem with providing a more, you know, acceptable, if you
5 want to, bound the finishing of what, you know, the scope of
6 the assessment is? Because if I look at the guidance, it is
7 not bound. You said individuals and things, and then
8 somebody can get up there and say uh, uh, look, you know,
9 you got this one, this one, this one. No, but you know, my
10 expertise tells me, ah, but see this is a process, since
11 this is a process and you have not bound it by something,
12 you know, then you get into the first phrase and --

13 CHAIRMAN JACKSON: How are you proposing that it
14 be bounded?

15 COMMISSIONER DIAZ: I am proposing that the Staff
16 takes and defines what, you know, for the scope of the
17 assessment, what risk-significant structures, systems and
18 components should be, how they should be defined, okay, how
19 we should get at a definition of what they are. And then in
20 the guidance, you can talk about the process of doing that.

21 CHAIRMAN JACKSON: But you can't -- there is no
22 scope that is the scope for all time for all plants. The
23 plants are different.

24 COMMISSIONER DIAZ: Nothing in this book, Madam
25 Chairman, tells you that it applies to -- you know, that

1 it's a specific plant. All of it is, that's why the rule,
2 you know, has to be, you know, it has to be able to apply,
3 and then the specific differences are taken care of. You
4 know, we talk about a plan with 44 high, you know, high
5 risk-significant systems. Others say they have 28. When
6 you say, you know, high risk-significant, it applies to both
7 the one that has identified 28 and the one that identified
8 44, and you already took care of the difference between 28
9 and 44.

10 CHAIRMAN JACKSON: But high risk significance -- I
11 think the point that the Staff is making is that if you take
12 the systems one at a time, at a time, at a time, you have
13 one definition. If you look at them being taken out of
14 service together in combination, you have another situation.
15 And so that you can't define the scope just in terms of the
16 one at a time, at a time, at a time definition of what is
17 risk-significant. So you have to bridge that gap. And if
18 you can bridge that gap, then we are home free. But the
19 issue is you can't do it as a one at a time, at a time, at a
20 time analysis. Otherwise, we wouldn't even be talking about
21 configuration.

22 COMMISSIONER MCGAFFIGAN: Madam Chairman, just as
23 a -- this would be a little bit out of order, but would --
24 since this language also is almost identical to something
25 that NEI sent in --

1 CHAIRMAN JACKSON: Exactly.

2 COMMISSIONER MCGAFFIGAN: -- could I ask whether
3 an NEI representative would want to address whether
4 paragraph 3 on page 3 -- or paragraph 2, I guess, on page 3
5 of the reg guide is compatible with these words, or whether
6 if you guys were writing the reg guide, it would say
7 something significantly different?

8 MR. PIETRANGELO: No.

9 COMMISSIONER MCGAFFIGAN: But, you know, the
10 paragraph we have been talking about earlier, which is the
11 reg guide as it exists, the answer is no. These same words
12 that the Staff believes, I think, are consistent with this
13 paragraph, NEI believes is inconsistent with this paragraph.
14 So I think --

15 MR. HOLAHAN: Let me clarify, please.

16 COMMISSIONER MCGAFFIGAN: ACRS apparently believes
17 something else.

18 MR. HOLAHAN: Well, I think we are talking about
19 two slightly different things. The words in the reg guide
20 were written before the words in the modified rule that we
21 have presented you today.

22 COMMISSIONER MCGAFFIGAN: Right.

23 MR. HOLAHAN: In my mind, I would edit those words
24 to be more consistent with this version of the rule, okay.

25 COMMISSIONER MCGAFFIGAN: But if the other thing

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1 could be straightforward --

2 MR. HOLAHAN: For example, it's not clear to me
3 that that first sentence that talks about individual and
4 combination is really needed.

5 COMMISSIONER MCGAFFIGAN: It's still there in the
6 later sentences, so that the -- I mean, I thought, you know,
7 you can edit, but if you are fundamentally changing what you
8 are going at, then you might edit to say a risk-informed
9 evaluation process to determine whether the systems,
10 structures and components that are significant to public
11 health and safety would include the following, and then go
12 on. I mean there would be a different lead-in to the
13 sentence --

14 MR. HOLAHAN: Go on to the next sentence that
15 talks about high safety significance and the scope of the
16 --

17 COMMISSIONER MCGAFFIGAN: But I think the heart of
18 the matter is that words -- the words -- the new rule
19 language may be significant -- still quite ambiguous as to
20 what reg guide goes with it, and -- whatever.

21 CHAIRMAN JACKSON: Anyway, where were we?

22 [Laughter.]

23 MR. MIRAGLIA: I think the words by themselves,
24 you need to look at the words in the rule, and then the
25 words in the reg guide. If these are the words that we're

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1 going to put in the rule, then we need to make sure we --

2 CHAIRMAN JACKSON: Why don't you just transmigrate
3 the words from the reg guide to the rule? Is that too --

4 MR. HOLAHAN: I think you need a little more
5 detail in the guidance. Otherwise, I think --

6 CHAIRMAN JACKSON: Well, you can do more detail in
7 the guidance. I am only talking about this paragraph in the
8 middle of page 3.

9 MR. HOLAHAN: The most important word on that page
10 of the reg guide is draft.

11 [Laughter.]

12 CHAIRMAN JACKSON: That doesn't even have this.
13 This doesn't even rise to that level, and this is what we're
14 having a Commission meeting on, okay? So --

15 MR. MIRAGLIA: Work in progress, as we have
16 indicated in our memo.

17 COMMISSIONER MCGAFFIGAN: Madam Chairman, the

18 frustration that I have, that while you and Commissioner
19 Diaz were talking, the same words, these words here, the
20 Staff and perhaps ACRS, although ACRS has doubts, believe
21 are largely consistent with this draft, draft, underline
22 draft, reg guide. NEI believes that these words are
23 inconsistent with this draft draft, underline draft, reg
24 guide. And so there is still going to be an argument --
25 MR. PIETRANGELO: No, no, we do not say that,

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1 Commissioner.
2 CHAIRMAN JACKSON: We are going to ask you what
3 your bottom line is, too.
4 MR. PIETRANGELO: You can have different sets of
5 words that are consistent with the rule, but mean the same
6 thing, though. What we are thinking that meets that new
7 portion of the rule versus what is in the Staff reg guide.
8 I think we have different --
9 CHAIRMAN JACKSON: Well, the Staff -- what's in
10 the Staff's reg guide sounds a lot like what's in your reg
11 guide, or your earlier reg guide.
12 MR. PIETRANGELO: It's not the same. It's not the
13 same.
14 COMMISSIONER MCGAFFIGAN: My concern is that the
15 argument -- whatever words we choose, and we are fallible
16 humans -- whatever words we choose to put in here as the
17 link to the scope argument, the scope argument having been
18 kicked over to the reg guide, there's still going to be an
19 argument --
20 MR. PIETRANGELO: The key word --
21 COMMISSIONER MCGAFFIGAN: -- and I hope that -- I
22 don't know quite how to prevent that argument as to what the
23 words mean.
24 MR. MIRAGLIA: It's still a nested set. I think
25 you need the guidance, and I think what you just heard from

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1 the industry is that, given that language, it's important to
2 also understand what's going to be in the reg guide.
3 What Gary just said is that given the language in
4 the rule, we need to make sure that there is those kinds of
5 linkages. So we have not defined it absent what -- you need
6 the reg guide with these words, or without these words,
7 you're going to need a reg guide. And that's the question.
8 The Staff's proposal originally that we went to
9 the ACRS with and we went to CRGR with is that we thought we
10 could deal with that in the context of the reg guide, and
11 that's the proposal that we had, and I think that was a
12 near-term issue, and in terms of scheduling process, we
13 indicated in response to the concern raised by the industry
14 since the reg guide is important, it's -- we need to
15 understand what that guide is going to be, and that is why I
16 think the point that Bill raised relative to the timing of
17 the reg guide and the effectiveness of the rule is
18 important. Because both of these things have to meet, and
19 there has to be a mutual understanding of what's in the rule
20 and what's in the reg guide, and that's consistent by all
21 our stakeholders. And I think that is the concern you just
22 heard expressed. And I think whether we keep going down the
23 path with the rule package that went to the CRGR and the
24 ACRS, that's going to have to happen, and if Staff has got a
25 proposal on how to time the reg guide to make sure that we

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1 have that agreement before we come to the effective date.
2 If you go this way, you're going to have these rules, and
3 then you're going to make the reg guide so there's mutual
4 understanding. But, I think, you know, you need both
5 pieces, and maybe we ought to talk a bit about the timing of
6 the reg guide to address --

7 CHAIRMAN JACKSON: Well, let's let Commissioner
8 Merrifield ask his question, and then I want you to take up
9 on page 9 and walk through that.

10 COMMISSIONER MERRIFIELD: Yes, I guess probably my
11 question is probably a lead-in. I'm just wondering, is it
12 your intention to give CRGR an opportunity to review the
13 revised reg guide, and if so, what's the -- how does that
14 fit into your timing proposal for this?

15 MR. MIRAGLIA: We are prepared to address that.
16 We have got a presentation on that.

17 CHAIRMAN JACKSON: Why don't you walk through
18 that.

19 MR. MIRAGLIA: We are referring to the time line
20 for the reg guide and how we would interact with ACRS and
21 CRGR with respect to the draft reg guide.

22 CHAIRMAN JACKSON: Why don't you do it in a more
23 structured form. Go to page 9, walk through that,
24 Commissioner Diaz asked for that. Then go to page 10 and
25 that allows you to talk about the reg guide.

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1 MR. CORREIA: Slide 9. Okay, thank you.

2 Again, as we have discussed here this afternoon,
3 our thinking at this time on what the regulatory guide for
4 this modified language, May 1999, might be would be some
5 variation of the configuration risk management process
6 that's currently in Reg Guide 1177.

7 The configuration risk management program, or
8 CRMP, as it's called, scope includes SSCs modeled in a plant
9 PRA, plus the high safety significant SSCs determined
10 through the maintenance of reg guide and industry guideline.

11 The question ACRS has, is this enough? Will this
12 capture the population of those SSCs that you are most
13 concerned with?

14 This is early thinking, where the thought was we
15 would revisit this scope and evaluate and determine if this
16 indeed is enough, or does it have to be modified in some way
17 to capture everything we are looking for? Well, we thought
18 this would be a smart starting point, since it's already
19 been written pretty much to use as a surrogate for (a)(3) of
20 the rule because it's not enforceable, and for those
21 licensees that requested tech spec change for an extended
22 AOT, this was one of the processes that they would have to
23 adopt.

24 Again, it's already been discussed extensively
25 with the Commission, the ACRS, the CRGR, and the thinking is

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1 this would be a logical starting point.

2 NEI, in their letter of March 17th of this year,
3 discussed the possibility of using CRMP as a scope for
4 (a)(4). So I think they are close in thinking, anyway, in
5 that regard.

6 Slide 10.

7 Our current plans as addressed in the rulemaking
8 package that we have would recommend that once the rule is
9 forwarded to the Commission, that the effective date of the

10 rule be 120 days after the regulatory guide is issued
11 finally, to give Staff and Licensees enough time to develop
12 the reg guide and have mutual understanding of what the
13 intent is, what the thinking is behind it, and enough time
14 for them to implement the change, and then make the rule
15 final.

16 Our thinking -- and I guess it goes back to what
17 version of the rule we settle in on -- that it would take
18 probably six to nine months from the time we have a final
19 rule to the time we issued the reg guide final, to go to the
20 ACRS, CRGR, public comment, probably a workshop with
21 industry to discuss this on either side of the -- once in
22 the draft stage, once near the final stage, reconciliation
23 of comments, before the reg guide would be final. That's
24 our current thinking.

25 CHAIRMAN JACKSON: Which version of (a)(4) would

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1 your rulemaking include?

2 MR. CORREIA: Page 8.

3 CHAIRMAN JACKSON: Page 8?

4 MR. CORREIA: Yes. That is the plan.

5 CHAIRMAN JACKSON: But with the implication that
6 the scope of the assessment would be bridged to this
7 regulatory --

8 COMMISSIONER McGAFFIGAN: Madam Chairman?

9 CHAIRMAN JACKSON: Please.

10 COMMISSIONER McGAFFIGAN: I brought 1.177 along
11 with me, too, just to -- I want to understand the scope of
12 structures, systems and components. I'm reading 2372 of
13 CRMP. Included in the CRMP is all SSCs modeling Licensees'
14 plant PRA, in addition to all SSCs considered high safety
15 significant per Rev. 2 of Reg Guide 1.160, which is the
16 maintenance rule, that are not modeled in the PRA. So
17 that's -- but later on it says when you -- which is the
18 sentence that we were just looking at earlier, later on it
19 says within the plant configuration described by the tech
20 spec action statement with risk-informed, if additional SSCs
21 become inoperable and nonfunctional, the risk assessment,
22 including at a minimum a search for risk-significant
23 configurations, will be performed in a time frame defined by
24 the plant's corrective action program.

25 Is that -- is the additional SSCs that become

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1 inoperable under CRMP only the SSCs in the scope of the CRMP
2 program, or is it other SSCs? I mean here you are
3 presumably looking for combinations, that's what the CRMP
4 program -- I interpret that sentence to mean look for
5 combinations when you do one of these things. Tell me what
6 CRMP implies. Does this combination issue come up in CRMP?

7 MR. HOLAHAN: Sure. The combination issue is
8 covered inherently by the scope of the PRA, and that third
9 bullet under section 3 which you just read, was not meant to
10 be another scoping issue. What it was meant to cover is
11 when there are unplanned situations, when you are already in
12 some configuration, and then find that something else fails,
13 or you discover a failure, it -- then I think the scope of
14 whatever -- what it says is a risk assessment at that point
15 is the same scope as the rest of the CRMP.

16 COMMISSIONER McGAFFIGAN: Okay.

17 MR. HOLAHAN: So if something else goes out of
18 service, but it's not within CRMP's scope, then nothing more
19 needs to be done.

20 COMMISSIONER MCGAFFIGAN: Okay.
21 MR. MIRAGLIA: There's parallel language in the
22 draft reg guide in terms of that same page 3 which talks
23 about --
24 MR. HOLAHAN: It was not meant to increase --
25 MR. MIRAGLIA: -- discovery of emergent failures.

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1 COMMISSIONER MCGAFFIGAN: Okay.
2 CHAIRMAN JACKSON: Okay. Commissioner Dicus?
3 COMMISSIONER DICUS: No.
4 CHAIRMAN JACKSON: Commissioner Diaz?
5 COMMISSIONER DIAZ: No.
6 CHAIRMAN JACKSON: Okay, this is what I'm going to
7 do. I'm going to ask Mr. Correia, Mr. Holahan, and I guess
8 Mr. Miraglia, to stay at the table, and then I am going to
9 ask the NEI representatives to come forward. A
10 recommendation has been made by one of the Commissioners
11 that we will have a robust discussion, having all the
12 players at the time, and if I don't have the right
13 combination of individuals, then those of you --
14 MR. MIRAGLIA: We have ample help on call.
15 COMMISSIONER DIAZ: Madam Chairman, in
16 consideration of those who are 41 years old, could we have a
17 two-minute break?
18 CHAIRMAN JACKSON: Absolutely. We will take a
19 five-minute break.
20 [Recess.]
21 CHAIRMAN JACKSON: Okay. I am going to call on
22 Mr. Beedle to --
23 MR. GRAY: Madam Chairman, if I could. The
24 Commission, of course, can hear from the persons at the
25 table as to what the rule looks like, but the Commission

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1 should not in this session negotiate rule language. I would
2 just like to --
3 CHAIRMAN JACKSON: Well, then, I am going to
4 excuse Frank and Gary and Rich. That way we won't make a
5 mistake, and then ask Mr. Beedle and his folks to move over.
6 Thank you. Mr. Beedle.
7 MR. BEEDLE: Good afternoon, Madam Chairman.
8 CHAIRMAN JACKSON: I don't have your slides.
9 MR. BEEDLE: We don't have any slides. Things
10 were moving so rapidly, we couldn't catch up with them.
11 CHAIRMAN JACKSON: I see.
12 MR. BEEDLE: Actually, I was reminded of the movie
13 Amadeus, when they were critiquing Mozart's latest symphony,
14 and said this is really a great symphony, but maybe there
15 are too many notes, and I think maybe we've got too many
16 words in there.
17 We have indeed been working on this for a long
18 time, and we have tried to accommodate the concerns of the
19 Staff and we originally said let's change the "should" to
20 "shall," and we thought that was the end of it, but little
21 did we know. Here we are a couple of years later still
22 talking about it, so I want to bring some real practicality
23 to this discussion, so we have asked Harold Ray to talk
24 about the practicality of the maintenance rule and what the
25 users' concerns are and what the user views are in

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1 connection with this rule language.

2 COMMISSIONER MCGAFFIGAN: Madam Chairman, not to
3 limit Mr. Ray, but I think rather than getting the whole
4 history of the maintenance rule, I hope we can focus on
5 (a)(4) or (a)(3) --

6 CHAIRMAN JACKSON: Well, let's cut to the chase.
7 What is your bottom line?

8 [Laughter.]

9 MR. RAY: Chairman Jackson, my bottom line is that
10 I'm here as an ally of the good and, if necessary, an enemy
11 of the better and best, if that's what it takes to get this
12 job done.

13 So let me start by, if I may, saying that I,
14 speaking for the industry, support the summary that on a
15 couple of occasions in the dialogue before Mr. Miraglia
16 provided to you. That is to say, we have in front of us
17 here language from the Staff. I understand the ACRS has not
18 achieved closure yet with them on that. But language which
19 I think does as much as may be possible to do in the
20 regulation itself, and there are substantive issues that
21 need to be resolved. I don't know that they can get
22 resolved in the language. We will have some suggestions to
23 make to this language, but I want to say right off the top,
24 they are just suggestions. If they are not -- if they don't
25 find acceptance with the Commission, the industry is quite

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1 satisfied with the language as it stands now, and we feel we
2 can work with it, recognizing --

3 CHAIRMAN JACKSON: With which language? (a)(4)?

4 MR. RAY: Yes, the point on page 8 that was
5 referred to by --

6 CHAIRMAN JACKSON: Page 8.

7 COMMISSIONER MCGAFFIGAN: Do you want Mr. --

8 MR. RAY: I'm going to stick on (a)(4), no matter
9 what, but as I said, we will make some suggestions to the
10 wording for your consideration, but I think we have gotten
11 to a point, and I do want to emphasize this, that as painful
12 as this process may have been up until now, it has produced
13 fruit insofar as I think we are at the point where the
14 discussion can move into the domain of the guidance that
15 will be associated with this rule.

16 With that in mind, then, let me move to the
17 language, and I perceive that you'll have questions that
18 you'll want me to respond to, or Mr. Pietrangelo here with
19 me. And let me also say that as Ralph commented, we are not
20 here with a presentation. There are two reasons for that.
21 One, we thought it would be most useful if we responded to
22 the dialogue that you would have had with the Staff ahead of
23 us; and secondly, much of the material we are talking about,
24 we only just received, and I came here from a meeting
25 downtown with the industry in which we were looking at piece

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1 parts of it in real time.

2 I think that, one, it might be a gratuitous, but
3 nevertheless, a comment I want to make to you for your
4 consideration also is that very often in this package, what
5 is happening is being characterized or could be interpreted
6 to be a reaction by the Commission to bad things that are
7 potentially going to happen in the industry, and again, as I
8 did at the stakeholders round table some time ago, urge that
9 the Commission consider viewing what we are doing here as
10 providing an opportunity to enhance safety and to achieve
11 the aims in a more effective way that I think we all share.

12 CHAIRMAN JACKSON: Let me just interject. I mean
13 I believe my point of view is always that we do what is
14 prudent, particularly if it has the effect of maintaining
15 and/or enhancing safety, and just as I, you know, in private
16 sessions, will say that we shouldn't reference what we are
17 going to do or if those from the industry talk about our
18 rogue inspectors and that kind of thing, I don't accept that
19 kind of language, and that is not a basis for our moving
20 ahead.

21 Similarly, the basis of our moving ahead should
22 not be based on a castigation of what the nuclear industry,
23 you know, would do, and so I think we are here to do what is
24 prudent from a health and safety point of view.

25 MR. RAY: Very good. This is an opportunity for

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1 us to improve the results that we are all striving to
2 achieve.

3 So now let me move quickly on to one of the
4 subjects I would offer to you that follows up on quite a bit
5 of the inquiry that Commissioner McGaffigan was pursuing,
6 and that is the question of scope.

7 I do take the point of view given where we all
8 are, and having listened to the comments of the
9 Commissioners here this afternoon, that we are going to have
10 to resolve this in the guidance and, as I said before, I
11 agree with Mr. Miraglia's characterization of the fact that
12 that is work yet to be completed.

13 However, it would be remiss of me if I didn't say
14 that in the language on page 8 that has been offered to you,
15 the industry would prefer and, in fact, urge that the last
16 sentence basically say that the assessment should be limited
17 to those high safety-significant structures, systems and
18 components as defined for the particular plant in question
19 by application of the maintenance rule itself.

20 In other words, there is a set of components that
21 we already recognize and has been accepted, with a lot of
22 scrutiny, by the NRC as being high safety-significant
23 components.

24 Now I well understand, and Commissioner McGaffigan
25 pointed out, that the proposal, I believe, as I understand

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1 it, that the Staff is making would expand that to include
2 items that are addressed by the PRA itself.

3 Now I would only offer to you this experience. We
4 all thought, I believe, going back quite a few years, that
5 when we said that the maintenance rule should include any
6 item mentioned or referred to -- I forget the exact phrase
7 now -- in emergency operating procedures, that that seemed
8 like a sensible and logical thing for us to do. But I would
9 be here to tell you that I think that that had unintended
10 consequences. There's lots of things, it turned out, that
11 were referred to in emergency operating procedures that
12 basically have caused the application of the maintenance
13 rule as a whole to get entirely bogged down.

14 Similarly, I am concerned -- and perhaps this is
15 what Commissioner Diaz was inferring as well -- that by
16 simply referring to anything in the PRA and say that if it's
17 in there, then you need to consider it in the context of
18 (a)(4), is going to present us with a scope addition or a
19 breadth of scope which will be beyond that which is
20 necessary and justified by the purposes of (a)(4) in the

21 first instance.
22 Nevertheless, in the paragraph referred to here on
23 page 3 of the draft reg guide, which you have been looking
24 at, and was a question to us as we were sitting in the back,
25 let me attempt -- and I'll ask Tony to help me if necessary

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1 here -- to answer the question, what is different between
2 this and other scope definitions.

3 Well, it begins with, in the very first sentence,
4 it has the phrase "individually or in combination" -- I'm on
5 page 3, second paragraph -- "that can be shown to have a
6 significant effect on the performance of key safety
7 functions."

8 That reference to "in combination" introduces an
9 uncertainty, I'll call it, with respect to, as Commissioner
10 Diaz illustrated, how many things in combination. What
11 exactly is it that we are talking about as determining what
12 the process of looking at things in combination should be.

13 It goes on, as I have already mentioned, and
14 refers to, in essence, SSCs modeled in Licensees' PRA, in
15 addition to SSCs considered to be risk-significant.

16 So I am now repeating what I said earlier, namely
17 I think we have an issue here yet to be resolved on the
18 issue of scope. The industry would prefer to see it
19 resolved in this wording here, but in the interest of simply
20 putting a bridge here, as the Staff has referred to it, to
21 this further discussion, you know, we certainly can
22 understand and accept that that is the expedient thing to do
23 at this point as far as the rule language is concerned.

24 Do you have any questions on that point?

25 COMMISSIONER MCGAFFIGAN: Madam Chairman, can I --

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1 CHAIRMAN JACKSON: Yes, please.

2 COMMISSIONER MCGAFFIGAN: Is SONGS one of the
3 plants that has gotten one of the allowed outage time
4 extensions and committed to a CRMP program?

5 MR. RAY: Yes.

6 COMMISSIONER MCGAFFIGAN: Does CRMP require you to
7 look at combinations? Does Reg Guide 1.77 -- or when you
8 take -- when you're in this allowed outage time period and
9 additional structures, systems, and components are required
10 to be maintained or taken out of service, or whatever the
11 right word is, to be nonfunctional for a period during
12 maintenance, do you have to look at potential combinations
13 as a part of your CRMP commitment, just as a factual matter?

14 MR. RAY: I have to answer it this way: We do,
15 and I can't tell you whether or not if we didn't that would
16 be okay. In other words, our system inherently does that.
17 There are eight of us at the last count I had, that had
18 these CRMP programs. As far as I know, those that I know of
19 that do have similar capability to what we have at San
20 Onofre. So we are going to be talking here about not what
21 is a non-issue for us, because that indeed is the case, but
22 whether or not we are imposing something that is warranted
23 on the industry as a whole. And that means -- excuse me,
24 Tony, I'm sorry. That means is -- have we arrived at the
25 point where we believe it's justified to require in essence

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1 that the PRA, which was done to satisfy regulatory
2 requirement at some point in time, be, as we do at San
3 Onofre, kept available and used for the purpose of

4 configuration management.

5 MR. PIETRANGELO: I thought Gary was right before
6 in the way he characterized the CRMP. You don't see that
7 combination language. It's assumed that the PRA is capable
8 of looking at what actually is out of service. I don't
9 think you do all these potential what-ifs when something
10 happens. They look at it. That was an emergent work clause
11 that you were citing, Commissioner McGaffigan, and I think
12 Gary identified it as that.

13 COMMISSIONER MCGAFFIGAN: But I'm just reading the
14 English, if additional SSCs become inoperable or
15 non-functional, a risk assessment, including at a minimum a
16 search for risk-significant configurations, will be
17 performed in a time frame commensurate with -- defined by
18 the corrective action program.

19 Does that -- you know, if the Staff were to go and
20 take these sorts of words and put them in the reg guide for
21 (a)(4), can you live with it? Because they're saying
22 they're going to take the words with regard to the scope,
23 but if they -- you know, if they go further and take all of
24 these words, are you then in a situation where you will be
25 complaining to us about the guidance? You started off by

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1 saying the guidance is where the argument needs to be
2 transferred to, but -- and I guess I'm trying to anticipate.

3 MR. RAY: Well, to be fair to the Staff,
4 Commissioner, it seems to me that they have been clear that
5 you wouldn't necessarily have to have an on-line risk
6 monitor in real time.

7 COMMISSIONER MCGAFFIGAN: For most of the stuff.

8 MR. RAY: That's right. I don't want to suggest
9 that that's the necessary outcome. Perhaps Tony knows. But
10 I just don't know what the middle place is. I know that you
11 can't -- you would not be able any longer to treat the PRA
12 as it is done today. It would have an impact to say
13 whenever you do something that affects a component modeled
14 in the PRA, you must take that into account in an
15 assessment. That would have an impact. How much of an
16 impact, it would be very hard for me to speculate about, but
17 --

18 MR. PIETRANGELO: All we said in our letter was
19 the CRMP was one way to do it that had already been accepted
20 by the Staff. I think where we're really coming down, if
21 you want bottom line, Chairman, we've had a process
22 established through implementation of the maintenance rule
23 to identify the high safety-significant SSCs. To my
24 knowledge, the Staff did not write one violation associated
25 with how a Licensee identified what the high

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1 safety-significant SSCs were. And correct me if I'm wrong,
2 but I don't recall one. But that process was looked at. It
3 used importance measures associated with PRA. It took those
4 insights, put them through an expert panel process. We had
5 all sorts of industry meetings on that process, a lot of
6 sharing of information between plants on how to do that, and
7 we got down to a set of safety-significant SSCs. We think
8 we already meet that provision of the rule, and we have done
9 it already; not that there even has to be additional
10 guidance necessarily identified for how to do that.

11 In fact, the regulatory analysis that basically
12 supports this basically takes credit for what we have

13 already done, and the one time -- that's why we object to
14 what's in the draft guide because whether the Staff put
15 these new words in the rule or not, they're still saying you
16 have to do the same one-time assessment in the guidance to
17 get there. There was no change in the guidance. That's why
18 we couldn't get together last summer because we were always
19 working with words that reflected a risk-informed scope, and
20 the Staff wasn't.

21 CHAIRMAN JACKSON: Let me -- Mr. Correia, you had
22 a comment you wanted to make? Why don't you go to the
23 microphone.

24 MR. CORREIA: It is true that during the baseline
25 inspections, we never cited anyone for not having a -- the

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1 correct list of risk-significant SSCs. One very good reason
2 is no requirement to do it. It was -- it's a recommendation
3 in the NEI guidance document we accepted for purposes of
4 treatment and determining the performance criteria goals of
5 the rule. Given that, there were no violations.

6 The other issue, as you brought up earlier, was
7 that those determinations were made on an SSC-by-SSC case.
8 They were looked at individually, using importance measures,
9 and determined what impact they would have on plant risk.
10 Given the expert panel process, they were determined to be
11 high or low safety-significant.

12 CHAIRMAN JACKSON: Okay. Thank you.

13 MR. PIETRANGELO: Right. And there is a question
14 now in terms of the Staff doesn't like that for a
15 configuration of risk management because it doesn't look at
16 all the combinations. Okay? And I would stipulate that
17 there may be set out there, if you put them together, as
18 Commissioner Diaz went through, you could find something.

19 CHAIRMAN JACKSON: Well, how can you bound it?
20 Because there is no such thing as configuration risk
21 management if you are doing one at a time, at a time, at a
22 time. Configuration means just that. You have certain
23 equipment out of service, and you have to be able to play
24 one thing off against another to understand, you know, how
25 -- what kind of a risk profile the plant is in as a

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1 consequence of that. I mean -- and so that's what I don't
2 understand here in terms of this argument, that it has to be
3 some middle ground that maybe admittedly bounds things, but
4 it can't be -- the solution is not one at a time, at a time,
5 at a time. That doesn't make sense to me. You wouldn't
6 have a configuration risk management program if that were
7 the case.

8 MR. RAY: Well, let me say that we are not
9 suggesting you do things only one at a time, Chairman
10 Jackson. We are suggesting you consider limiting the scope
11 of this assessment to the high safety-significant items.
12 And I would maintain, contrary to what is often alleged,
13 that supporting systems that are out of service that do
14 affect any high safety-significant item, does require
15 consideration in that context. But in any event, that's one
16 --

17 CHAIRMAN JACKSON: Well, how does one clarify that
18 part of it, then?

19 MR. RAY: That the supporting systems that affect
20 --

21 CHAIRMAN JACKSON: That's right. Let's cut to the
22 chase.

23 MR. PIETRANGELO: They're high. They're already
24 high.
25 MR. BEEDLE: If you take a supporting system out

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1 of service that affects a high risk component, it puts that
2 high risk component in jeopardy and out of service, so
3 you've got to -- you can't ignore it.

4 COMMISSIONER MCGAFFIGAN: So, just to clarify,
5 Madam Chairman, all supporting systems that affect high
6 safety significant systems are themselves high
7 safety-significant?

8 MR. PIETRANGELO: I'd be surprised if you'd find
9 any that weren't such, because when you take a supporting
10 system out, it doesn't take just one system out, it takes
11 several systems out.

12 COMMISSIONER MCGAFFIGAN: Does the Staff agree
13 that all -- I mean --

14 CHAIRMAN JACKSON: All supporting systems support
15 high safety-significant systems under the maintenance rule.

16 MR. RAY: Before the Staff answers, could I say
17 that I don't think Tony's answer included what I will call
18 system interaction effects. So we do need to take that into
19 consideration, but you asked a question which was how can we
20 bound this, and I am suggesting simply you can bound it to
21 achieve a reasonable outcome in terms of what I think your
22 ultimate goal is. In order to be absolutely certain that
23 you have encompassed everything that might have any effect
24 whatsoever, of course, the broadest possible scope is the
25 only answer you can come to. But I believe we were in a

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1 mode here in which we were looking to achieve, as I said,
2 the good rather than the best or perfect that we might some
3 day achieve.

4 CHAIRMAN JACKSON: But the system interaction is
5 the good. How are we going to bound it?

6 MR. PIETRANGELO: Madam Chairman, you are
7 confusing the -- when this original scoping was done to get
8 the safety-significant SSCs within the broad scope of the
9 maintenance rule, that was not a configuration assessment.

10 CHAIRMAN JACKSON: Absolutely. I know that. I'm
11 not confused at all.

12 MR. PIETRANGELO: What we're saying is but,
13 nevertheless, you can take that as a bounding scope and
14 apply the configuration assessment to it, we believe through
15 what the PRA insights gave you, plus what the operating
16 experience and expert panel gave you, that that does a
17 pretty good job of bounding what should be applied to this
18 (a)(4) assessment. And all the other -- you know, this
19 combination business, you had a couple anecdotes that, quite
20 frankly, Commissioner, we have not been able to confirm.

21 COMMISSIONER MCGAFFIGAN: I guess I should ask, if
22 I could, the testimony is the rule language may be good
23 enough and it's time to move to the guidance, and your view
24 -- if we tossed you all in a room for 24 hours --

25 CHAIRMAN JACKSON: You can't do that.

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1 MR. GRAY: Guidance, you can do that.

2 COMMISSIONER MCGAFFIGAN: -- toss you all in a
3 room for 24 hours --

4 [Laughter.]

5 MR. GRAY: But you couldn't throw everything into
6 guidance, so --
7 COMMISSIONER McGAFFIGAN: In a public room, this
8 is a public room.
9 [Laughter.]
10 COMMISSIONER McGAFFIGAN: But is there a chance
11 that these -- this combination issue of the supporting
12 system issue, the system interaction issues, could --
13 reasonable people could come to an agreement? We understand
14 where your ingoing position is, we understand where the
15 Staff's is, or is that something you need the Commission to
16 rule on? Will the guidance be back before us in six to nine
17 months because --
18 MR. PIETRANGELO: I think it will.
19 COMMISSIONER McGAFFIGAN: -- with us fighting --
20 with you guys fighting over two different --
21 MR. PIETRANGELO: Yeah, because we've been down
22 this path already, and the Staff didn't change the guidance
23 based on the rule change. They really didn't change
24 anything except the words in the rule.
25 CHAIRMAN JACKSON: I think their position is they

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1 haven't had time to change that.
2 MR. PIETRANGELO: But I think that --
3 CHAIRMAN JACKSON: No, no, no, they've made that
4 very clear, that they have not had time.
5 MR. RAY: And I think we should accept that to be
6 the case.
7 Having said that, my judgment is we have work to
8 do yet on this issue, and I think we understand the points
9 that you've been -- are implied by your questions, Chairman
10 Jackson, and that there is a difference of view here. And
11 again, to summarize, we think that adequately address the
12 concerns that the Commission has had by limiting the scope
13 of the configuration assessment to the high
14 safety-significant SSCs.
15 There is obviously a debate about that and making
16 the scope larger to include other things, and that's where
17 we are, and I just don't think that, as much as we would
18 like to see you resolve that here in this language, that
19 that is likely to be a reasonable thing for us to ask for.
20 CHAIRMAN JACKSON: How much of a problem is it for
21 you to do this sensitivity test one time?
22 MR. BEEDLE: I think this -- you are asking the
23 industry to take on a major task of analyzing every
24 combination and permutation of equipment in the plant --
25 CHAIRMAN JACKSON: But let me get Harold's point

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1 of view because, you know, you're in the middle of it, and
2 you have a configuration risk management program.
3 MR. RAY: I do, and that makes me personally not
4 well suited to give you a prediction on the outcome. But if
5 you asked me whether or not we could -- let me make sure I
6 understand the question.
7 You are asking how much of an effort would it take
8 for us to see if there was something that would be bounding
9 that might go here in the rule language --
10 CHAIRMAN JACKSON: No, it could be in the
11 guidance.
12 MR. RAY: Oh. Well --
13 COMMISSIONER DIAZ: On page 3, the last sentence
14 of page 3, that's what Chairman Jackson is referring to.

15 CHAIRMAN JACKSON: Right.
16 MR. RAY: Okay. Well, I think that that process
17 -- Tony said that we believe we've done it already, but it's
18 not such that we couldn't do it again without a reasonable
19 effort, if I understand the point that you are making.
20 In other words, so long as we can narrow the scope
21 down so that the -- you know, our concern is that from an
22 operational standpoint -- there are some other points, and
23 I'm way out of time here, that I haven't gotten to yet, so I
24 need to say that it's the operational implementation of this
25 requirement that concerns us all; not can we sit down in a

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1 room and in a week or a month or in some period of time work
2 out something that we all agree on at that point in time.
3 That's not the point. The point is out there in the plants,
4 in the middle of the night or on the weekends or all the
5 other times that the plant has to be configuration-managed,
6 do we have a practical system that can be implemented?
7 That's the question.

8 CHAIRMAN JACKSON: Well, maybe I could live with
9 your definition of a high safety-significant scope as
10 defined in the maintenance rule, if I knew that you at least
11 at one point in time -- and the periodicity issue is open --
12 did a sensitive test to assure that in the sense of
13 configuration risk, you had it right. That's all I'm trying
14 to tell you, that that is to me, you know, the only prudent
15 thing to do.

16 MR. RAY: Okay. And I would accept, as speaking
17 for the industry, that that's a reasonable thing for us to
18 work on, to see if we can --

19 MR. PIETRANGELO: I think that part has been done,
20 too, and Rich probably knows it better than I do, citing the
21 PECO example, okay?

22 CHAIRMAN JACKSON: But that's PECO.

23 MR. PIETRANGELO: Well, you asked for one
24 sensitivity --

25 CHAIRMAN JACKSON: No, no, no, no, no. I'm

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1 talking about all plants doing it one time.

2 MR. RAY: You have each plant do it as a way of
3 defining the scope for itself, without having to implement a
4 safety monitor that does it in real time.

5 MR. PIETRANGELO: I get a lot of phone calls on
6 the maintenance rule.

7 CHAIRMAN JACKSON: So do I.

8 MR. PIETRANGELO: When we put out the -- our own
9 rule language, we have had a task force on it. Here is the
10 sensitivity from the industry. And then there's also a
11 consistency-incoherency question to be looked at, too, also.
12 This was one of the first rules that allowed risk insights
13 to be used to focus resource's attention on the high safety
14 significant stuff, all right? That's already been done in
15 all the plants. You've got a culture out there that is
16 focused on --

17 CHAIRMAN JACKSON: Tony, you have not addressed my
18 one at a time, at a time, at a time.

19 MR. PIETRANGELO: Well, I'm about to, Chairman.

20 CHAIRMAN JACKSON: Okay, please do.

21 MR. PIETRANGELO: Let me get to that, all right.
22 They feel -- most plants feel like they have identified a
23 set of high safety-significant SSCs that they need to focus

24 on.

25 Now for this new -- and this goes back to, well,

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1 we should have just changed "should" to "shall," like
2 Commissioner McGaffigan said before, we could have just
3 taken the guidance, endorsed that, and you would have had
4 enforceability against this provision, with a pretty good
5 damned process in place already. That's all we're trying to
6 do is get to the bottom line quick. We've got a process
7 that already has been looked at by the Staff, identifies the
8 high safety-significant SSCs, already -- you know, there is
9 no additional burden on Licensees to take that set, that is
10 consistent with the tools they are already using to perform
11 this assessment. Yet instead of just changing "should" to
12 "shall," and getting enforceability, now we want another
13 little tweak in the process, whether it's one time or --

14 CHAIRMAN JACKSON: Well, but you have your issue
15 which has to do with burden on the industry. We have our
16 issue which has to do with configuration risk management and
17 maintenance activities.

18 MR. PIETRANGELO: Right.

19 CHAIRMAN JACKSON: So understand now that we have
20 different drivers here, and we are trying to come to a
21 reasonable solution.

22 MR. BEEDLE: Madam Chairman, if I may add, I don't
23 think that you as a group of Commissioners and your concern
24 for risk management, configuration management, is any
25 different than the plant management.

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1 CHAIRMAN JACKSON: Well, he talked about burden,
2 okay? And we are interested in not creating unnecessary
3 burden.

4 MR. BEEDLE: Well, I understand that.

5 CHAIRMAN JACKSON: But we will deal with necessary
6 burdens.

7 MR. PIETRANGELO: And if you deal with it, then it
8 should be in the regulatory analysis, too, and stated in
9 there, Chairman, and it's not.

10 COMMISSIONER MCGAFFIGAN: Madam Chairman, the
11 reason I get perplexed -- if I could, I'm going to have to
12 leave in a second for my daughter's orthodontist appointment
13 that I'm already late for -- but the -- if I look at the reg
14 guide, it says that the SSCs that you have to look at are
15 the SSCs that support key plant safety functions, and you
16 define key plant safety functions in your reg guide. That
17 seems to me -- isn't that a larger group than what we are
18 talking about today?

19 MR. PIETRANGELO: Yes. Yes.

20 COMMISSIONER MCGAFFIGAN: It's not just the SSCs
21 that are modeled in the PRA or the ones that the maintenance
22 panel has -- so to some extent, you know, you have had a
23 pretty broad scope to your assessments with "shoulds" rather
24 than "shalls" all the way through Chapter 11.

25 MR. PIETRANGELO: The industry guidance is dated

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1 in this regard, because you can't take just, say, key safety
2 functions. Most people will say right away, those include
3 all the safety-related functions. Okay? And then --

4 COMMISSIONER MCGAFFIGAN: So this reg guide really
5 doesn't reflect the current NEI position? Okay. That's
6 --the -- I guess I'll leave it at that.

7 MR. RAY: Well, I'd like to -- before you leave,
8 Commissioner McGaffigan, say that we have been talking about
9 scope and we can see how problematic it is, even at this
10 point in time, although I think there's room for resolution,
11 perhaps, as the Chairman has suggested.

12 There is then still the issue of judgment. That
13 is to say, this thing calls for an assessment, and that's
14 understood to be an assessment on the part of the Licensee.

15 COMMISSIONER MCGAFFIGAN: Right.

16 MR. RAY: And management of the risk that results.
17 But throughout here, there is the implication that there is
18 another judgment to be made, and that is the judgment that
19 you all would make as a regulator. And, therefore, there is
20 an unaddressed future issue here, it seems to me, which is
21 implicit, but I don't -- I am not proposing that we can even
22 achieve closure on it, and that is the question of how much
23 risk is okay and how much is not, and how are we ever going
24 to come to some conclusion about that.

25 So while, on the one hand, we debate about whether

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1 or not to include this item or that item in the scope or
2 not, there's --

3 CHAIRMAN JACKSON: Do you have a point of view
4 about how to address that?

5 MR. RAY: I don't. That is, not as a spokesman
6 for the industry, I do not.

7 COMMISSIONER MCGAFFIGAN: Madam Chairman, that was
8 the other question that I had in my mind that I lost, was
9 what -- with the new oversight process that you all have
10 been intimately involved in, in your -- it's called, I
11 think, the Morris Engine or the Morris whatever by the
12 Staff, but the significance determination process. Doesn't
13 that answer that question to some degree? If somebody goes
14 and puts themselves in a configuration, either through lack of
15 assessment or bad assessment or making what in our view is a
16 bad judgment, perhaps, the Morris engine is the significance
17 determination process is the thing that will pop that out.

18 MR. PIETRANGELO: That's right.

19 COMMISSIONER MCGAFFIGAN: And you have to be
20 pretty bad to pop out; right?

21 MR. PIETRANGELO: Right.

22 COMMISSIONER MCGAFFIGAN: So why the concern? If
23 the Morris engine or the significance determination process
24 is the metric by which we are going to judge that?

25 MR. RAY: Let me answer that. I think your

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1 perception of the outcomes is exactly right, but it leads me
2 then to question why we should be struggling so much over
3 trying to get the last remote non-high-safety-significant
4 item included in this assessment process and ground, because
5 our concern again is a process concern. We live with
6 inspection and enforcement all the time. When people don't
7 dot the I's and cross the T's. I haven't even gotten to the
8 before issue.

9 [Laughter.]

10 MR. RAY: So it's the problem in the
11 implementation in the field that we are concerned about
12 primarily. And with that, I --

13 CHAIRMAN JACKSON: Well, all I'm really saying is,
14 I mean I don't think that things are so far out of whack. I
15 mean some of this has to do with ownership of words, a lot

16 of it, to me. But if you have some scope and someone asks
17 you to do a sensitivity analysis as to whether, you know,
18 that scope is really okay, one time, I don't see what the
19 big deal is.
20 MR. PIETRANGELO: I think Commissioner Diaz gave
21 you the answer to that, Chairman. It's unbounded. How many
22 different combinations can you look at one time?
23 MR. RAY: I started to provide an answer.
24 Assuming that we have reasonable rules for doing that, then
25 I would agree with you. If there's nothing more than just

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1 what you said, then I'm in Mr. Diaz's camp, and I'm not sure
2 that we're --
3 CHAIRMAN JACKSON: But that's the point, isn't it
4 -- well, we're doing it, anyway, the minute we talk about
5 reg guides.
6 MR. BEEDLE: Chairman, if we talk about these
7 combinations, if I have 100 pieces of equipment in my
8 maintenance rule coverage, I think, if I recall correctly,
9 to figure out what all those permutations and combinations,
10 what is it, I don't know, hundred factorial, or something
11 like that. I mean it's a major effort to try --
12 CHAIRMAN JACKSON: But you have already talked
13 about those systems that support the high safety-significant
14 systems. Okay?
15 MR. RAY: Right.
16 CHAIRMAN JACKSON: And that's a different set than
17 the high safety-significant systems, and there seems to be
18 some degree of indeterminacy of whether there is a real
19 definition of those support systems being included as part
20 of the high -- and so that's what I'm talking about in terms
21 of being able to do some kind of sensitivity analysis. I
22 don't see that that is such a big deal. That is not all
23 these, you know, gazillion permutations and combinations.
24 MR. RAY: Can I differentiate between support
25 systems, which I share Ralph's off-the-top-of-the-head view

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1 that support systems all the way back to the heat sink, from
2 the reactor fuel clad to the heat sink, are all high
3 safety-significant systems. When I said system
4 interactions, I meant, you know, two over one kind of things
5 where you have structures that may be --
6 CHAIRMAN JACKSON: I understand that, but all I'm
7 trying to say is we need a strawman. You know, we've got to
8 get beyond our B and C on each side, okay? And we need a
9 strawman, okay? And that's all I'm really trying to say, of
10 how you get to that.
11 MR. RAY: Okay. One or two other things, then.
12 CHAIRMAN JACKSON: Please.
13 MR. RAY: I mentioned the -- before -- I'm going
14 off my little list of things. You know, when we left the
15 meeting downtown this morning, we thought this is great,
16 this wording is just fine. It was only when we sat back
17 here that we decided there was a problem.
18 [Laughter.]
19 MR. RAY: Anyway --
20 COMMISSIONER MERRIFIELD: That's why we held this
21 meeting today.
22 MR. RAY: -- we do suggest that in the statement
23 of considerations in the package here is just fine. And
24 it's clear about emergent conditions and so on and so forth.
25 The rule language itself -- and I think here we have to turn

1 to the counsel -- though, would potentially be problematic.
2 Our view is that we are willing to rely on the statement of
3 considerations which basically says if you have an emergent
4 condition, fix it, don't wait for an assessment to be done,
5 if the thing is broken and it affects the safety of the
6 plant; or if you see it, fix it, you don't then --

7 CHAIRMAN JACKSON: So you could live with the
8 language in conjunction with the statements of
9 consideration?

10 MR. RAY: That's correct. That's right. The
11 literal reading of the language here, though, would suggest
12 in the parentheses in the first sentence that before
13 performing corrective maintenance, for example, which might
14 be emergent, you want to do an assessment. I understand the
15 intent, it's expressed well in the statement of
16 considerations, and we have nothing more to say to you,
17 other than that the language of the rule itself could be
18 interpreted otherwise.

19 MR. PIETRANGELO: Right. So "before" may mean
20 later? Or "before" may mean not at all?

21 MR. GRAY: That "before" language was included in
22 the proposed rule, and presumably we have made that comment.

23 MR. PIETRANGELO: We had another clause.

24 MR. RAY: Yes, and it was picked up in the
25 statement of considerations almost word for word. So that's

1 correct.

2 And with that, the last comment I have to offer to
3 you is again that I've commented before, and that is I find
4 problematic the claim that the tech specs are intended only
5 to address single component out-of-service conditions, and
6 are somehow not adequate to deal with maintenance when the
7 reactor is at power, and so on.

8 But having said that, I think the real issue is
9 going to only emerge later when we decide what the level of
10 judgment is with regard to the risks that we are assuming
11 with these various configurations and where we are going to
12 draw the line of what is acceptable and what is not. And
13 that lies in the future.

14 CHAIRMAN JACKSON: Do you have a comment you
15 wanted to make, Mr. Correia?

16 MR. CORREIA: No, thank you.

17 CHAIRMAN JACKSON: All right.

18 MR. BEEDLE: Chairman, when we started all this,
19 we were trying to go "should" to "shall" in order to give
20 the Staff the ability to enforce and impose what they
21 thought was a reasonable requirement to do an assessment of
22 equipments when you take them out of service to do
23 maintenance. And as we know, they -- the industry had been
24 doing that. We've got mechanisms that we use to assess.
25 Some plants have got more sophisticated mechanisms than

1 others, but they all have a methodology that is used to
2 assess equipment taken out of service to do maintenance,
3 whether we are at power or shut down.

4 So the Staff's original intent to get some
5 mechanism to make this enforceable has now got us into a
6 position where we are having protracted discussions on what
7 the scope of it is and the reality is, over the last two

8 years we have still been doing it, and I think we have kept
9 the plants safe. We have done what was necessary, and
10 that's prudent management. It's not just because it's part
11 of the rules and regulations, it's prudent management to
12 manage your risk.

13 CHAIRMAN JACKSON: Thank you. I am not even going
14 to give my usual closing comments. I would just like to
15 thank every -- oh, let me -- I'm sorry. Commissioner
16 Merrifield? I'm sorry. I went through too fast.

17 COMMISSIONER MERRIFIELD: That's all right.
18 I'm not sure where to start. I mean we have the
19 modified (a)(4) provision which in the train down here, the
20 subway down there, thought was good and subsequently, as a
21 result of what was a very interesting meeting today,
22 determined may not be so good.

23 We have the draft reg guide which the Staff has
24 said is -- the draft is the most important word on page 3.
25 This draft was written mainly, it seems to me, primarily for

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1 language which has now been superseded by the modified
2 (a)(4) provision, so this doesn't apply any more, and so the
3 outcome of this needs to be rewritten.

4 I guess, given all the things in front of us, is
5 there, in your eyes, a success path for us to move forward?

6 MR. RAY: Yes, sir. I would take Chapter 11 of
7 NEI 93-01 which is currently endorsed in Reg Guide 160, Rev.
8 2, use that as a basis for the industry to propose to the
9 Commission language that would implement the rule as
10 adopted, making it more clear, as it will necessarily have
11 to be, and enforcement space, that is to say there things
12 that were acceptable ambiguities before will no longer be
13 acceptable, and will have to be clarified. But I would
14 propose that we put before you something that you could
15 endorse in a Revision 3 to the Reg Guide 160 as Revision 2
16 endorses NEI 93-01, for the purposes of configuration
17 management.

18 In other words, 93-01 implements the maintenance
19 rule. This now becomes an addition or a modification to
20 maintenance rule. We can revise the industry guidance to
21 address it, and to incorporate the issues that we have
22 discussed at length here today, and provide it to you as a
23 vehicle for Commission endorsement.

24 MR. PIETRANGELO: Now a lot of that work has been
25 done starting last summer, and the Staff has seen various

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1 versions of that, so it would be to take that guidance and
2 to reflect whatever the final rule is, and work with the
3 Staff to try to get that endorsed. That's what we intend to
4 do. And that was whether the guidance or the rule was going
5 to be risk-informed or not, we still would have moved
6 forward with that effort to develop the guidance.

7 CHAIRMAN JACKSON: I think our lawyer has
8 something to say.

9 MR. GRAY: I was simply going to say this was --
10 is the sort of approach that was taken with the original
11 maintenance rule in terms of developing guidance and the NRC
12 then considering endorsing it.

13 CHAIRMAN JACKSON: Okay. So the gist of your
14 proposal is that even though, you know, you might have
15 modified something in this modified (a)(4), that you can
16 live with it, with the statements of consideration and with
17 this approach to the reg guide that you have just

18 delineated?
19 MR. RAY: Correct.
20 CHAIRMAN JACKSON: Okay. Commissioner Diaz? I'm
21 going to have to disappear.
22 COMMISSIONER DIAZ: Quickly, this difference to
23 me, it looms big, of, you know, in the rule between high
24 safety-significant SSCs, and you know, I have seen several
25 times people interchangeably use risk-significant SSCs with

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1 high risk-significant SSCs, and this is, you know, where the
2 bottom line is. In other words, we need a common definition
3 that everybody can understand that is usable by the
4 industry, can be enforced by the NRC, and so do you have a
5 stated preference or -- you say you can live with the
6 language of having the risk-informed process, but I thought
7 you stated that you would prefer to be bound -- to bound the
8 scope by high safety significance?

9 MR. RAY: That was correct, Commissioner Diaz. I
10 very much wanted to make that point clear, and thank you for
11 reinforcing it.

12 COMMISSIONER DIAZ: Okay. Thank you.

13 CHAIRMAN JACKSON: Okay. Thank you.

14 [Whereupon, at 4:44 p.m., the briefing was
15 concluded.]

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