

ORIGINAL

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Title: BRIEFING ON DRAFT MAINTENANCE
REGULATORY GUIDE
PUBLIC MEETING

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BRIEFING ON
DRAFT MAINTENANCE REGULATORY GUIDE

PUBLIC MEETING

Nuclear Regulatory Commission
One White Flint North
Rockville, Maryland
Wednesday, November 10, 1999

The Commission met in open session, pursuant to notice, at 9:30 a.m., Richard A. Meserve, Chairman, presiding.

COMMISSIONERS PRESENT:

- RICHARD A. MESERVE, Chairman of the Commission
- NILS J. DIAZ, Commissioner
- GRETA J. DICUS, Commissioner
- EDWARD McGAFFIGAN, JR., Commissioner
- JEFFREY S. MERRIFIELD, Commissioner

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1 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

2 ANNETTE L. VIETTI-COOK, Secretary of the
3 Commission

4 KAREN D. CYR, General Counsel

5 WILLIAM TRAVERS, EDO

6 ROY ZIMMERMAN, Deputy Director, NRR

7 GARY HOLAHAN, Director, Division of Systems Safety
8 and Analysis, NRR

9 RICHARD CORREIA, Chief, Reliability & Maintenance
10 Section, NRR

11 RALPH BEEDLE, Senior Vice President & Chief
12 Nuclear Officer, Nuclear Generation, NEI

13 TONY PIETRANGELO, Director, Licensing
14 Nuclear Generation, NEI

15 HAROLD RAY, Executive VP, Southern California
16 Edison Company

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P R O C E E D I N G S

[9:30 a.m]

CHAIRMAN MESERVE: Good morning. We are here this morning for the briefing on the draft maintenance regulatory guide. Commissioner Merrifield had another commitment that requires him to be a few minutes late. He will be here shortly, and he asked me to apologize to everyone for his what of necessity will be a late arrival.

One of the challenges for me as a new Commissioner is I feel like I am running and trying to catch a whole series of moving trains. I hop off one and then I race to try to catch another one that sometimes may be headed in a tangential direction. In any event, this is one of those issues.

My understanding of historical context for this is that the Commission amended its Maintenance Rule 50.59 in 1991 originally and provided for an extended period before the rule became effective in order to develop guidance and to provide an opportunity for the regulated community to bring itself up to speed. The rule was to become effective in 1996.

There was an extensive period of inspections to evaluate how that had gone forward. Out of that came an amendment to the rule by a divided Commission last summer, I believe, that amended Rule 50.59 to provide for certain

1 assessments to be undertaken before maintenance was started.

2 That rule, as I understand it, provided that that
3 amendment would become effective 120 days after a regulatory
4 guide would be issued, and that regulatory guide was one
5 that was going to be subject to Commission review and
6 approval.

7 I understand that the staff has been working with
8 NEI on the development of that regulatory guide. We have
9 not seen it yet, but the purpose of our session today is to
10 get an update on the status of the efforts to develop the
11 guide. We are going to hear both from the staff and also
12 from representatives of NEI with whom you have been working.

13 With that as the context, unless we have some
14 comments or corrections by my colleagues.

15 COMMISSIONER MCGAFFIGAN: Mr. Chairman, I want to
16 use the opportunity. Mr. Travers is about to introduce his
17 panel. One member, Rich Correia, this will be his last
18 meeting before the Commission on the maintenance rule. He
19 has been at this since 1991, working on maintenance rule
20 implementation. He has done a great job. I want to
21 acknowledge his hard work.

22 I hope we are going to have a lovefest here today.
23 I see Tony Pietrangelo giving me the thumbs up, and that is
24 good. So maybe this will be the crowning achievement of
25 Mr. Correia's career up to this point before he goes on to

1 the project directorate where I am sure he will have a great
2 future career. I just want to acknowledge Rich's efforts.

3 MR. CORREIA: Thank you very much.

4 COMMISSIONER DIAZ: I must add that Commissioner
5 McGaffigan is an eternal optimist.

6 [Laughter.]

7 CHAIRMAN MESERVE: All right. Why don't we get
8 under way.

9 MR. TRAVERS: Thank you, Chairman. I would like
10 to echo everything that has been said so far at the table.
11 Staff recognizes Rich's efforts as fundamental to what has
12 been happening these last several years on the maintenance
13 rule. We appreciate the opportunity to have the Commission
14 recognize him for that.

15 Chairman, as you indicated, we are here to update
16 the Commission on the status of our efforts to develop the
17 regulatory guidance that is intended to accompany the recent
18 revisions of 50.65 that were approved by the Commission in
19 the summer. Those rule revisions, as you pointed out, are
20 slated to become effective 120 days after the guidance is
21 issued.

22 As directed by the Commission, we have been
23 working to develop this guidance in a very open forum with
24 our stakeholders and have specifically included interactions
25 with both ACRS and the CRGR prior to coming to the

1 Commission for their approval with the regulatory guidance.

2 We actually met with representatives of the
3 nuclear industry in a series of public meetings. As you
4 will hear today, we expect to be in a position to endorse
5 industry's NUMARC 93-01 revision guidance as an acceptable
6 approach for meeting the new elements of the maintenance
7 rule.

8 Joining me at the table today are Roy Zimmerman,
9 who is the deputy director of the Office of Nuclear Reactor
10 Regulation; Gary Holahan, who is the division director of
11 the Systems Safety and Analysis Division, NRR; and, of
12 course, Rich Correia, who is the chief of the reliability
13 and maintenance Section, NRR. Rich is going to begin
14 today's briefing.

15 MR. CORREIA: Thank you, Bill.

16 Slide 2, please.

17 [Slides shown.]

18 MR. CORREIA: As you outlined just a moment ago,
19 Chairman, on May 13 the Commission sent the staff an SRM
20 directing us to continue developing the rule revision and to
21 have it to the Commission by May 17, and also to seek review
22 of the draft regulatory guidance by CRGR and ACRS, and to
23 work with industry to produce a final regulatory guide.

24 On May 17 the SECY package was delivered with the
25 revised rule.

1 On July 19 it was published, to become effective
2 120 days after the guidance was published.

3 The next slide shows the final rule. It does
4 include the optional limited scope provision, which is the
5 last sentence, which is something that was developed fairly
6 late in the rulemaking process.

7 Slide 4, please.

8 Since the last Commission meeting in May, we have
9 been reviewing NEI's guidance document, Section 11 to 93-01,
10 and in parallel have been developing our own regulatory
11 draft guide, DG-1082.

12 In both cases we have two objectives.

13 The first objective is to endorse acceptable
14 industry practices. Licensees have essentially been
15 implementing this requirement voluntarily since the rule
16 went into effect. We have inspected every licensee in the
17 country and felt that this guidance should contain the
18 better practices that we have seen out there. That was our
19 goal and NEI's also.

20 The second objective was to define optional
21 scoping criteria guidance. Since that was a new part of
22 this rule, that needed to be developed. We used our
23 in-house PRA expertise and sound advice from the ACRS in
24 evaluating the scoping criteria, and we feel that the
25 guidance as currently written provides acceptable guidelines

1 for determining this limited scope.

2 Next slide, please.

3 As the EDO mentioned, we have been interacting
4 fairly frequently with stakeholders on this guidance
5 document since the May time frame. We ha four public
6 meetings with NEI to discuss various revisions that they
7 have given us.

8 We also participated in an NEI public workshop
9 widely attended in Miami. Unfortunately, hurricane Floyd
10 shortened it. But even for that one day we did get good
11 feedback from licensees that were looking at what NEI and
12 the staff were doing in developing the reg guide, and we
13 believe we have incorporated the essence of their comments.

14 Up until yesterday we had looked at five revisions
15 to the NEI guidance document. We received what we hope is
16 the final draft yesterday.

17 Slide 6, please.

18 Based on our review of that revision, we believe
19 that we have no remaining issues. A few weeks ago we had a
20 few issues that needed to be resolved. We believe we have
21 reached resolution.

22 Our plans are to finalize our draft regulatory
23 guide endorsing the NEI revised Section 11 to 93-01, and as
24 directed by the Commission, to publish for public comment in
25 mid-December draft guide 1082 for a 30-day public comment

1 period.

2 We have laid out a schedule based on that
3 publication on slide 7.

4 The SRM from the May 13 meeting directed the staff
5 to have the draft guide to the Commission for information.
6 We plan to have that to you by the end of November.

7 Two weeks later, have in the Federal Register the
8 draft guidance documents for a 30-day public comment period.

9 And the rest of the schedule follows accordingly:
10 Resolve comments.

11 Meet with ACRS and CRGR.

12 And to process the final guidance for Commission
13 review and approval probably mid to late March of next year.

14 That is pretty much where we stand and where we
15 have been. I think it's a success story so far, and we
16 should move forward.

17 CHAIRMAN MESERVE: Thank you very much.

18 You indicated that you had recently resolved a
19 series of issues. What were the contentious issues at the
20 end and how were they resolved?

21 MR. CORREIA: There were three. One was the
22 scoping issue: which SSE should be in scope using the
23 limited scope option that the rule offers.

24 We were always very close with NEI. There was
25 never a disagreement that the high safety significant

1 systems and trains should be in scope; those systems and
2 trains and components modeled in the licensees' level 1 PRA
3 should be in scope. It was the remaining small population
4 of other SSEs. I think we all understood what we wanted.
5 We just couldn't get the right words on paper. That kind of
6 fell into place very recently between our PSA people and
7 NEI's people. We believe we resolved that issue.

8 The other issue was what methods should be
9 employed to determine the risk significance of any one
10 particular configuration. Initially NEI proposed to use a
11 significance determination-like process. We had much debate
12 over that process and whether or not that was adequate for
13 what (a)(4) needed to do.

14 In the end, NEI revised that to include guidance
15 that was more consistent and widely used by many, many
16 licensees, using the EPRI PSA applications guide, which we
17 found to be implemented successfully at most sites.

18 The third issue was the definition of
19 unavailability, which was more global to the maintenance
20 rule, the new oversight process, INPO's EPIX program, a few
21 other data collection and evaluation programs. We were very
22 close on that also. In the end, we resolved it and agreed
23 that we should have one definition for all applications, and
24 that is what is in the guidance document today.

25 So all those three issues came to closure fairly

1 quickly over the last few weeks.

2 CHAIRMAN MESERVE: Thank you.

3 Commissioner Dicus.

4 COMMISSIONER DICUS: This is on slide 5. It has
5 to do with your interactions with stakeholders. You
6 mentioned that the meeting in Florida was widely attended.
7 So clearly there were stakeholders there other than NEI and
8 licensees. Or was there?

9 MR. CORREIA: I know there were NSSS vendors
10 there; some of the owners' group representatives were there;
11 even a few lawyers were there.

12 [Laughter.]

13 COMMISSIONER DICUS: I'm almost sorry I brought
14 the question up.

15 MR. CORREIA: Trade press was there also.

16 COMMISSIONER DICUS: One of the things we continue
17 to hear more and more about was yesterday in our materials
18 stakeholders meeting, communication, how we address
19 stakeholder concerns, and particularly members of the public
20 or public interest groups, whether they feel that they are
21 really getting feedback on their comments. Even if we don't
22 accept a comment, what we did with it.

23 I'm a little curious when you have these public
24 meetings how this is going. When you write something and we
25 put it in the Federal Register, it's clear that we answer

1 the concern and we say we accept it, we don't accept it.
2 But in public meeting, how we are doing this. The whole
3 issue of transparency is getting much, much more important.
4 If you would give us a little feedback on that. Maybe you
5 didn't address the public comment.

6 MR. CORREIA: We would obviously answer any
7 question that was asked of us at the meeting. Typically, we
8 always write a meeting summary that addresses the major
9 discussions and concerns.

10 We also have our maintenance rule web site. We
11 receive many questions from licensees and non-licensees
12 regarding (a) (4) and other parts of the maintenance rule.
13 We try very hard to be diligent and respond quickly.

14 COMMISSIONER DICUS: Did all of this help bring
15 resolution to the three remaining issues?

16 MR. CORREIA: I'd like to think so. NEI could
17 probably answer that better than we could.

18 COMMISSIONER DICUS: I will ask them to answer it
19 when they come to the table.

20 That's all. Thanks.

21 CHAIRMAN MESERVE: Commissioner Diaz.

22 COMMISSIONER DIAZ: I have no questions or
23 comments.

24 CHAIRMAN MESERVE: Commissioner McGaffigan, do you
25 have any questions or comments?

1 COMMISSIONER MCGAFFIGAN: Yes. I am looking at
2 yesterday's submittal by NEI. The big issue back in May was
3 low risk-significant systems that might in combination be
4 risk significant. That was in part being driven by ACRS.
5 It suggested that you needed to go down that path. As best
6 I can see, looking at the final draft from NEI, that issue
7 has been largely resolved in favor of dropping the
8 conversation. Am I right?

9 MR. CORREIA: Yes.

10 COMMISSIONER MCGAFFIGAN: We are basically just
11 looking at risk-significant things that have been determined
12 to be risk or safety significant either by being included in
13 the PSA or through the expert panel process that is used at
14 each plant, that is already well established in Chapter 9 of
15 the guidance.

16 MR. HOLAHAN: When the issue was raised as to the
17 concern about whether combinations of low safety-significant
18 items really needed to be covered in the scope of the rule,
19 a large part of the concern was are these things modeled
20 well enough in the PRA so that that is the mechanism for
21 capturing them. When the staff drafted one of its
22 intermediate positions, in effect what we did is wrote those
23 down not as scope issues, but quality of PRA issues.

24 In effect, what we have done is shifted the ground
25 of that discussion. The issue didn't really dissolve. The

1 issue was resolved, in my mind, by making sure that the PRA
2 appropriately dealt with those issues, and then, if it's in
3 the scope of the PRA, it gets captured.

4 COMMISSIONER McGAFFIGAN: ACRS agrees with this?

5 MR. HOLAHAN: I think so.

6 COMMISSIONER McGAFFIGAN: We might have had a
7 united Commission, Mr. Chairman, if this issue had been
8 resolved -- I look at Commissioner Diaz -- this way in May.
9 I'm glad that it has ultimately been resolved this way. It
10 does indeed look like a lovefest. And I don't mind being
11 called an eternal optimist by my fellow Commissioner.

12 [Laughter.]

13 CHAIRMAN MESERVE: Commissioner Merrifield.

14 COMMISSIONER MERRIFIELD: Thank you, Chairman.
15 First, I would like to express my regret for my late arrival
16 to this important briefing. I had an equally important
17 meeting that I was in that ran over, but I felt it was not
18 appropriate for me to cut it off. That is why I was
19 somewhat delayed.

20 I was made aware that Commissioner McGaffigan has
21 made some kind comments about Rich Correia. Even though I
22 wasn't here, I am told they were very appropriate, and I
23 wanted to second those. Rich has done a terrific job. As
24 he moves on to other things, we hope he keeps up the level
25 of excellence he has had for this agency.

1 Two questions I would like to ask.

2 I have had a chance to review the final draft
3 revisions to NUMARC 93-01. On page 17, under 11.3.8, the
4 documentation, under number 2: The normal work control
5 process suffices as a record that the assessment was
6 performed. It is not necessary to document the basis of
7 each assessment for removal of equipment from service as
8 long as the process is followed.

9 I read that and I sort of scratched my head, and I
10 thought, how are we going to go about judging the adequacy
11 of the assessment if we don't have documentation or
12 something upon which to record our assessments?

13 I am wondering if you could speak to that a little
14 bit.

15 MR. CORREIA: This has essentially been the
16 guidance since the beginning. The maintenance rule has no
17 documentation requirements. Being a performance-based
18 regulation, the inspectors are expected to focus on the
19 results achieved by the licensees.

20 What we mean by normal work processes is there is
21 planning, scheduling, all of those functions that licensees
22 perform that the inspector can look at, to look at what is
23 being done at any one particular time, and to focus on the
24 adequacy of the process that they are using to implement
25 this requirement, and to see that they both match up.

1 COMMISSIONER MERRIFIELD: The other thing I wanted
2 to ask. The general guidance from page 3 of NUMARC 91-01
3 states that "the degree of depth and rigor used in assessing
4 and managing risk should be commensurate with the complexity
5 of the plant configuration."

6 I recognize what that means. I have raised this
7 issue in other venues previously, and that is the issue of
8 consistency. What I am concerned about is how do we get
9 consistency among our inspectors so that equally situated
10 licensees have a predictable ability to understand how they
11 are going to be judged?

12 From an NRC work process standpoint, how are we
13 going to work with our inspectors, our regional folks, and
14 folks here in Rockville to make sure that we are acting in a
15 predictable and consistent way so the licensees can be
16 fairly judged?

17 MR. CORREIA: That is a general concern and I
18 wouldn't say a problem, but a challenge for all of the
19 maintenance rule. Again, it's performance based, risk
20 informed, results oriented, all those words. The Commission
21 gives each licensee a lot of flexibility on how they can
22 implement their programs.

23 It has been a challenge since the beginning for us
24 to train inspectors to understand that concept and to
25 understand that each and every inspection is unique, and we

1 have to look at the guidance that NEI has given them and how
2 licensees have implemented that.

3 It requires probably more oversight from
4 headquarters staff with the regions than probably other
5 regulations. During the baseline inspections Gary had
6 someone from his organization on every inspection; I had one
7 on every inspection. There were continuous phone calls and
8 interactions with the regions. It is not cut and dried and
9 simple, but it takes that kind of continuous training and
10 understanding to accomplish that.

11 COMMISSIONER MERRIFIELD: Thank you.

12 CHAIRMAN MESERVE: Any other questions or
13 comments?

14 [No response.]

15 CHAIRMAN MESERVE: I would like to thank the staff
16 very much.

17 We have another panel of presentations today.

18 COMMISSIONER McGAFFIGAN: Mr. Chairman, we didn't
19 know we were going to do this for you when you were coming.
20 It was originally thought it might be a contentious meeting,
21 but it is just was well you see a lovefest every now and
22 then too.

23 MR. BEEDLE: Good morning, Chairman,
24 Commissioners. We appreciate the opportunity to provide
25 industry perspective on a subject that has been with us for

1 a long time. I am going to defer to Tony to make some
2 observations concerning Rich Correia.

3 I have with me this morning Mr. Harold Ray,
4 executive vice president of Southern California Edison, San
5 Onofre operators, and Tony Pietrangelo, my director of
6 licensing for NEI.

7 We would like to start with Harold as he provides
8 some observations. He has been involved with this
9 maintenance rule for probably close to eight or nine years.
10 He is going to provide an industry perspective and an
11 executive perspective from the standpoint of the people that
12 are actually on the pointy end of the stick called the
13 maintenance rule.

14 Harold.

15 MR. RAY: Thank you, Ralph.

16 Because I will be touching on some things that I
17 think we will want to have in mind for the future, it might
18 not sound as totally positive as I think is deserved at this
19 point in time.

20 Let me begin by saying, as others have, that I
21 think we are at a point now this morning where we can see a
22 great deal of success having been accomplished through
23 process that has engaged all of us a great deal. This is a
24 very important rule. Even though it appears as something
25 called (a)(4) and 50.65, the fact is that it has to do with

1 configuration management which for every licensee is a very
2 important issue.

3 It isn't the subject matter that I would have
4 selected to first try to implement our current objectives
5 with regard to risk information. The reason for that is is
6 that it is something that is very, very important.

7 There is going to be a lot of interest on the part
8 of the industry, but also apropos of the dialogue between
9 Commissioner Merrifield and Rich just a little bit ago, it
10 is going to be something which I think the agency will have
11 to work hard to implement. We want to acknowledge that
12 here. So we are not just dealing with a minor update of the
13 regulation. I think we all see it as a very significant and
14 important step that we are now taking.

15 In the case of the industry, we are revising
16 something called NEI 93-01, as has been stated. That means
17 that it has been around now for six years. With that in
18 mind, I do want to acknowledge what Ralph said, that is to
19 say, I have been involved in this all along, as some others
20 have been, the implementation of the maintenance rule.

21 The circumstances here this morning are both the
22 same as they have been before and they are different. I
23 would like to comment on how they are the same and how they
24 are different, because I think that is important for us to
25 have in mind.

1 They are the same because we have achieved
2 consensus before among a group like this about the
3 implementation of the maintenance rule. The maintenance
4 rule itself and the implementing guidance were developed
5 over a long period of time with a lot of hard work on both
6 sides. Getting to an equivalent point, as we are here
7 today, I think everyone said that we had achieved some
8 considerable and significant progress, that there was a
9 guidance that was a model of clarity and understanding, that
10 everybody had finally resolved a lot of important issues,
11 and we were ready to proceed.

12 I think we would all acknowledge, though, that in
13 the implementation of the maintenance rule there was a lot
14 that we had to work through after the time that the initial
15 guidance was implemented, that is to say, 93-01.

16 I think we are at the same position here today.
17 We can all agree that we have resolved the issues that we
18 have been talking about now for quite a long while, that we
19 have a guidance document that reflects the work of the
20 agency and the industry and other members of the public who
21 have made input to it, and it is ready to implement, ready
22 to put into the field.

23 But there are a lot of folks out in the field who
24 will have to implement it. What I want to urge is that we
25 recognize the experience that we had with implementing the

1 maintenance rule. It has the character that Rich described
2 in response to Commissioner Merrifield's question, and it is
3 going to require, in our judgment, the continued effort that
4 Rich referred to.

5 I think it is essential for all of us to say,
6 well, this is a good document that reflects what the best
7 practice is in the industry today, and we want to endorse it
8 as such, but let's think about at some point, somewhere,
9 surely somebody is going to have noncompliance with it.

10 Do we really know what noncompliance looks like?
11 There will be circumstances in which I think every licensee
12 will say, yes, this is noncompliance and corrective action
13 is needed. But I foresee, as in the case of the
14 implementation of the maintenance rule itself, that we need
15 an ongoing dialogue about the implementation of this
16 configuration management program.

17 I just want to leave that point with you.

18 That is the same, I think. There was in the
19 implementation of the maintenance rule, of course, a lot of
20 work that went on. There was an oversight group here from
21 headquarters to follow up on the pilot inspections, and so
22 on, that were done. That is the same, and I expect it will
23 continue to be the same here.

24 What is different, though, and I believe gives us
25 more prospect for the success that I am sure we all crave in

1 the implementation of this configuration management
2 requirement, is I think there is a much greater commitment
3 today by all concerned to the changes which this
4 risk-informed process represents. It was a new idea six
5 years ago. It didn't even have that name applied to it, and
6 we were, I think, in a position then that is quite different
7 than it is today. Today there is a real desire for the
8 changes that are represented by this requirement and the
9 prospect that we might, for example, be able to risk inform
10 all of 10 CFR Part 50 will be significantly affected by how
11 well we do in implementing this configuration management
12 requirement.

13 I don't want to go back over things in the past
14 that I think are no longer necessarily true of today. We
15 had some rough spots in implementing the maintenance rule, I
16 think we all know.

17 I have been in the position of trying to sell this
18 concept, as some of you know, for a long time in the
19 industry. That has been my role as the chairman of one of
20 the working groups in this area, and I continue to do that.

21 Through the implementation of the maintenance rule
22 we did find that there was a degree of skepticism that has
23 developed in the industry about whether we can be successful
24 in achieving our aims. I think the time is right, that we
25 can be, but it does require, as I say, a recognition that

1 this isn't an easy thing to do. It is both important and
2 not easy, and we need to be committed to seeing it be
3 successful.

4 There has been some concern expressed in this
5 context, that maybe the industry is reluctant to embrace the
6 risk-informed initiatives that the Commission has undertaken
7 and there has been some lack of responsiveness maybe. I
8 think that concern is misplaced.

9 I believe that here we have a requirement that
10 will apply to everybody universally. It establishes a great
11 incentive for people to enhance the capability that they
12 have to do PRA work. There is built into this guidance a
13 strong incentive for all licensees to take advantage of this
14 technology and to use it, and I believe that will have an
15 effect.

16 Given what I have said up to this point and that
17 fact, I believe this will be a basis upon which there will
18 develop an acceptance, a renewed enthusiasm for changing the
19 regulatory process in the way that we are all talking about.

20 I will end with one last point. It was going to
21 ask you, Tony, when it was when we met down in Florida with
22 all the chief nuclear officers and developed the white
23 paper.

24 MR. PIETRANGELO: February of 1996.

25 MR. RAY: February of 1996, a time that will live

1 in all of our memories. At that time we got all the chief
2 nuclear officers together, and I say this, Chairman, for
3 your background in particular, and committed and voted,
4 actually, on a white paper which endorsed the use of risk
5 methodology going forward. It happened at that time that we
6 also experienced some events in the industry that I think
7 clouded that initiative which was taken at that point in
8 time.

9 But it's still there. It is still endorsed by the
10 industry. It hasn't changed, and I will tell you that this
11 (a)(4) that will now be implemented by this guidance I
12 believe will lead us further down the road and we will see
13 that it can be implemented successfully, that it will be,
14 and that that will provide the basis for us to do many other
15 things that I think we are craving to do.

16 With that, I will pass the ball to Tony to go
17 through the slides we have.

18 MR. PIETRANGELO: Before we get started, Ralph
19 alluded that I wanted to acknowledge Rich Correia's efforts
20 also. I wasn't on the maintenance rule when it first
21 started. We had another project manager at NUMARC at the
22 time that dealt with Rich and his folks on developing NUMARC
23 93-01. You probably should have given him an award just for
24 having to deal with that project manager at the time. He
25 was a pretty tough guy.

1 As difficult as some of the maintenance rule
2 implementation was that Harold alluded to, it would have
3 been a lot more difficult from an industry perspective
4 without Rich's efforts. You could always call him on the
5 phone and get a straight story about what was going on in
6 the field.

7 We were getting inundated with requests from our
8 members saying, what's going on with this? I thought we had
9 agreement, and it has fallen apart.

10 There are always two sides to a story. I just
11 want to say that our interactions with Rich have always been
12 very straightforward. We still have a ways to go with
13 implementation. So I hope whoever replaces Rich is as
14 dedicated as Rich was. We are going to miss him in
15 maintenance rule implementation, but we will see him in
16 another venue.

17 Slide 2.

18 [Slides shown.]

19 MR. PIETRANGELO: Just a little background. Rich
20 went through this already.

21 July '99 rule revision:

22 Required configuration assessment.

23 Required use of the assessment results.

24 And allowed the scope to be focused through
25 risk-informed process.

1 As Harold alluded to, we lobbied quite hard for
2 that last bullet. We thought the rule language needed to
3 encourage licensees to use a risk-informed process, and we
4 are very happy that the Commission included that.

5 We already had draft guidance in place. I think
6 part of what made the second deliberation go more smoothly
7 than the first time around is that we were working from
8 common rule language.

9 The first time we started this we had a version of
10 the rule we wanted to implement and the staff had a another
11 version of the rule they were trying to implement. Hence,
12 you had a draft regulatory guide and a draft industry
13 guidance document that were trying to do two different
14 things. Once the rule language itself was finalized by the
15 Commission, it made the task much easier.

16 We had a task force in place and it is still in
17 place today. I also want to acknowledge Biff Bradley from
18 NEI, the project manager of our industry task force. We
19 went through 17 drafts of this revision to get to the point
20 of the document that we sent you on Monday. Quite frankly,
21 Biff was getting a little bit tired of looking at the same
22 language. So I want to acknowledge his efforts as well as
23 the support we got from the industry in putting the document
24 together.

25 Next slide, please.

1 We have had three objectives all along in this
2 effort.

3 We think we have met the first one. We still have
4 to go through the comment period, but we are happy that the
5 guidance is going to be endorsed without exception.

6 There are two more objectives that we have in mind
7 that remain to be fulfilled. I think Commissioner
8 Merrifield's question referred to the second one: how do
9 you attain stable and predictable field implementation?
10 Rich's answer was right on. It's through a lot of hard work
11 and back and forth and dialogue.

12 I guess the point here was that we had an endorsed
13 document last time around on maintenance rule
14 implementation. Yet we allowed different interpretations to
15 come up in the inspection and enforcement process. That is
16 not the most efficient way when everybody is going to get a
17 baseline inspection to nail down a common understanding. We
18 think we have got a good process for interaction, and we
19 should be able to resolve these issues generically if it
20 regards something that has been endorsed on an
21 interpretation of our guidance document. So we want to see
22 that process continue even through field implementation.

23 The third objective, Harold's point, is really the
24 first step into the risk-informed, performance-based arena,
25 and I think it is going to shed a lot of light on whether

1 the effort for Part 50 is going to be successful or not.

2 This is not about four pilots trying to do things
3 in risk informing part 50; the whole industry is going to do
4 this. So the rule itself encourages licensees to use PRA to
5 further refine their tools and does provide an incentive. I
6 had some discussion with the ACRS last week about the
7 Commission not providing enough incentive to use PRA. Well,
8 right in the rule language you are giving them incentive. I
9 think that trumps the guidance document being prescriptive.

10 I know some of the staff will be surprised to hear
11 me say this, but sometimes prescriptive guidance is okay.
12 When it's right.

13 COMMISSIONER MCGAFFIGAN: They've got you quoted
14 on that.

15 MR. PIETRANGELO: Next slide, please.

16 You have the latest draft. It's still a draft
17 because we still want to go through the public comment
18 period. If there are any little tweaks we need to do, we
19 will do that when we consider the public comments, and then
20 send back revision zero.

21 You alluded to the issues we had to address here.
22 The main one was the scope that is set at the level 1, plus
23 the HSSCs. I remember when we had the last Commission
24 briefing we were talking about rankings and such, and we
25 only look at when you take one component out at a time.

1 This scope doesn't involve any ranking at all. It is what
2 was in the scope of the PSA, and I think Gary correctly
3 discussed the quality issues that came up in making sure
4 that the PSA adequately modeled what it had to in the level
5 1.

6 The other big issues, of course, were the
7 thresholds for managing risk. The letter we got back from
8 the staff in October helped our thinking a lot in terms of
9 what we needed to do to revise the document to get NRC
10 endorsement. It really went back to guidance that another
11 working group had developed, this PSA applications guide,
12 that had some temporary risk increase criteria in it. It
13 had to be put together in the maintenance rule context, and
14 that is what we did in the latest draft. It also provided
15 the permanent change criteria in Reg Guide 1.174.

16 You need both temporary and permanent change
17 criteria to do this right. So the document now reflects
18 both those past efforts on guidance.

19 As Rich said, we are also trying to pick up some
20 of the good practices that the staff has already inspected
21 and found acceptable in the field.

22 Next slide, please.

23 Given that we still have two other objectives from
24 our perspective, there are some next steps. This is what
25 everyone has referred to already. Just because we reached

1 agreement here inside the Beltway or a just little bit
2 outside the Beltway doesn't mean that everybody else gets
3 it.

4 So we will have other workshops. We will post
5 training materials on our web site. I assume that the staff
6 is going to continue to update the maintenance rule home
7 page on the NRC web site and answer those frequently asked
8 questions. Those are all very critical to trying to get
9 common understanding. But it's hard work, and we just want
10 to make sure that we maintain this dialogue and not let this
11 get off course through inspections and enforcement. If
12 there is a generic issue, we ought to resolve it
13 generically, not one at a time in the field.

14 We will be monitoring and assessing the
15 implementation. I think the overall objective here is to
16 ensure the intent of the rule is fulfilled, and that is what
17 we are dedicated to.

18 Last slide. We think the endorsement is the first
19 step in implementation. So we are off to a good start.
20 Again, we had that before and we let it get away from us.
21 So we have got a second chance, and you don't get many of
22 those in this business.

23 As I said before, the revised rule encourages
24 licensees to use risk-informed process. That was very
25 important to us.

1 As we get this feedback from implementation, we
2 will know a lot better about the prospects for risk
3 informing Part 50. That effort is off to a good start also.
4 The work the staff has done thus far is quite good. Now
5 that we have got a vehicle or mechanism that the whole
6 industry has to use, I think we will get additional feedback
7 that will play into that whole risk informing Part 50
8 effort.

9 That's it. Thank you very much .

10 MR. BEEDLE: Chairman, that concludes our remarks.
11 We will be prepared to answer any questions if you have any.

12 CHAIRMAN MESERVE: Thank you very much. While
13 this is, as you pointed out, an activity which is in
14 midflight, there are things that need to be done. This
15 appears to be a terrific success story for both the staff
16 and NEI to try to get these things worked out in a way that
17 meets the needs of both sides.

18 I have no questions. Commissioner Dicus, do you
19 have any questions?

20 COMMISSIONER DICUS: I don't have any questions.
21 I would like to make a comment. It follows on Commissioner
22 Merrifield's issue and the things that Mr. Ray said. I
23 think we all agree that the success of this so far has been
24 good. We have got something together. But the
25 implementation is going to be so critical to the ultimate

1 success.

2 I think we all recognize that it will not be a
3 flawless path. However we go and however we get there, we
4 have got to have the dialogue, the communication. We need
5 to hear from the industry how this is going.

6 What I hear from the industry is not so much
7 concern about where we are going with risk informing our
8 regulations, and so forth. In fact, everyone is on board
9 with this. But it is the pace at which we go together with
10 how well we do it.

11 We need to continue the dialogue. We need to hear
12 from you how this is going. When we hit a rough spot in the
13 road, we need to address that right then and continue,
14 because we all want this to be successful. I think it is
15 very important to our mission and the public health and
16 safety, and this is where we need to go, but we will need to
17 hear from you. I appreciated your comments.

18 CHAIRMAN MESERVE: Commissioner Diaz.

19 COMMISSIONER DIAZ: No questions or comments.

20 Thank you.

21 CHAIRMAN MESERVE: Commissioner McGaffigan.

22 COMMISSIONER MCGAFFIGAN: I will just join the
23 Chairman and Commissioner Dicus. I think the admonition
24 about we are only part way down the road is appropriate.
25 Despite Mr. Correia's moving, I hope we will have a lot of

1 continuity in the office that has been guiding the
2 maintenance rule. They have learned the same lessons
3 presumably that the industry has learned about
4 implementation.

5 Last week when Mr. Apostolakis was talking here he
6 hadn't had the benefit of seeing the November 8 document,
7 and he said this was late breaking. I think it was almost
8 instantaneous analysis on his part, but he was counting the
9 number of pages sort of in a quantitative versus qualitative
10 approach. I've done the same Apostolakis analysis, and I
11 agree with you guys. There is an incentive here to go to
12 risk informed. If you take a qualitative approach, there
13 are pages and pages as to what you should do; if you take a
14 quantitative approach, there is a lot less.

15 If you use the Apostolakis analysis on your
16 document, I think there is an incentive to go risk informed
17 and to use PSAs, and I appreciate that.

18 Congratulations so far. We hear the admonition,
19 Harold, and we will try to work on it.

20 CHAIRMAN MESERVE: Commissioner Merrifield.

21 COMMISSIONER MERRIFIELD: I certainly want to
22 weigh in in support of the comments made by my fellow
23 Commissioners and wouldn't want to repeat those. We've got
24 more to do. Let's keep our eyes on the horizon and not on
25 the rearview mirror.

1 Two quick questions. When we had our SRM of June
2 22, the Commission indicated the final rule should not
3 become effective until the final reg guide is in place for
4 at least 120 days. My question is, is that sufficient time
5 for the plants to develop and implement the infrastructure
6 necessary to implement the rule, particularly the procedures
7 and the training that will make it a success?

8 MR. RAY: It is, but it will require a real
9 focused commitment, as you can imagine. It would not be a
10 business as usual kind of an approach. It has got to be
11 something that, all right, this is in fact going to become
12 effective and considerable focused attention needs to be
13 given to it. In that regard, one would say, do we really
14 need to place that kind of particular stress on the
15 implementation from a timing standpoint?

16 One hundred twenty days is enough time, but it
17 does require a very deliberate and conscious effort on the
18 part of everyone concerned to be ready.

19 I think it is clearly in the discretion of the
20 Commission to decide how urgent it is. It would be
21 beneficial to the industry if we had more time. I'm not
22 here to say we must have more time. That's the best answer
23 I can give you.

24 COMMISSIONER MERRIFIELD: It wasn't my desire to
25 necessarily solicit an invitation to seek more time. We

1 demand a lot of our staff in terms of timeliness. Certainly
2 NEI and its members have demanded a lot of us as well. If
3 the industry and its members can demand the same vigor of
4 its own employees, we certainly appreciate that too.

5 MR. BEEDLE: Commissioner, could we add another
6 perspective on this 120 days?

7 MR. PIETRANGELO: The timing issue. Because this
8 rule, a large part of it, changed the "should" to the
9 "shall," people are already doing this stuff. So it's not
10 like there is a big change in the industry that is going to
11 occur.

12 The second part. I think people are going to go
13 back and look at risk informing the scope of their
14 assessment. There is some work to do there as well as look
15 at these thresholds and make sure their procedures are
16 consistent.

17 We will have a head start on the 120 days. We
18 will send the same document out this week to the whole
19 industry and advise them that it's the staff's intent to
20 recommend endorsement to the Commission. It is going to
21 receive public comment. They can get a pretty good head
22 start.

23 COMMISSIONER McGAFFIGAN: It could give them five
24 months head start.

25 MR. PIETRANGELO: On 50.59 I might come back with

1 a different story on implementation. We only get 90 days on
2 50.59.

3 COMMISSIONER McGAFFIGAN: They are setting us up
4 here.

5 COMMISSIONER MERRIFIELD: I didn't solicit that
6 one either.

7 MR. PIETRANGELO: Even though that effort is going
8 quite well in terms of the guidance development, that is a
9 little tight, 90 days on 50.59. We'll see.

10 COMMISSIONER MERRIFIELD: We will get to that one
11 later.

12 I want to get back to the second question I asked
13 our staff and I want to ask a similar question. As I am
14 concerned about inconsistency among our inspectors and among
15 our staff, certainly I also have a concern about
16 inconsistency among our licensees. I ask you. Do you
17 believe that the guidance is sufficient to prevent a large
18 variation in depth and rigor of assessment among licensees,
19 and how and what are you doing to try to provide some
20 consistency which will certainly make our job somewhat
21 easier?

22 MR. PIETRANGELO: It's a struggle we deal with in
23 developing any guidance document. That is why that other
24 remark made before was kind of funny, because we try not to
25 make these documents overly prescriptive. The plants are

1 all different, different vintages, different designs,
2 different organizations, and they do things differently. We
3 are not a monolithic industry. That is why the
4 performance-based approach that focuses on the results is
5 more important than kind of the prescriptiveness on how you
6 get there.

7 Having said that, we also want to have a guidance
8 document that is not so watered down that it provides no
9 guidance at all. So it's a balance we always try to achieve
10 in the final guidance.

11 I think in this case Section 11 was really
12 articulated out pretty well, and through the process, when
13 we sent the guidance out for industry comment, we got very
14 supportive comments back. That gives me confidence that
15 licensees think the guidance is sufficient.

16 We will follow up with workshops and breakout
17 sessions and let peers interact with each other and trade
18 notes on how they do it. We try to give that between the
19 lines understanding at our workshops and get people who are
20 actually implementing this to talk to each other.

21 That is about all we can do, Commissioner. I
22 don't know how else to do it.

23 COMMISSIONER MERRIFIELD: I have been doing enough
24 plants so that I recognize that all plants have unique
25 circumstances. Obviously there are parallels and there are

1 areas where there is consistency. To the extent that the
2 lessons can be learned from those and that can be simplified
3 and made consistent as much as possible it will certainly
4 ease some of the burden we have as a regulatory agency.

5 MR. BEEDLE: I think something else that you might
6 want to keep in mind is that as Commissioners you sit and
7 look at the operation of the plant and you are concerned
8 with the safety of the plant from a public health and risk
9 point of view. I think you need to keep in mind that the
10 executives like Harold Ray and Mike Tuckman and the rest of
11 the executives that are operating these facilities are
12 probably more concerned about it than even the Commissioners
13 are. As a result of that, they look at these processes to
14 make sure that those things do in fact gauge and measure
15 risk.

16 I think Harold is a good example of that. He has
17 put a lot of effort into that. He is personally involved in
18 it. I think they are carrying out their responsibility for
19 public health and safety.

20 COMMISSIONER MERRIFIELD: Just so the record is
21 clear, I want to say that no one is more concerned about
22 public health and safety than I am. There are many who are
23 equally as concerned.

24 MR. RAY: Let me weigh in on your question. This
25 requirement has two parts, assess and manage. In listening

1 carefully to your question, you ask about large differences,
2 how can we avoid large differences. I expect there will be
3 rather large differences in the assess part.

4 To the extent that we are concerned about those
5 differences from a regulator perspective, I think this is an
6 area that will require a lot of work. That is to say, we
7 have allowed here in this guidance wide differences in
8 methodology, for example. We have put incentives in place
9 which will drive people toward, I believe, use of more and
10 more consistent and rigorous methods, but nevertheless there
11 is room for quite a lot of difference in the assess portion.

12 I would expect from the agency standpoint the
13 important thing is that the assessment is done and that it
14 produces a discernible result which is acted upon.

15 The second part is manage. That is to say, what
16 do you do with the results of the assessment that is
17 provided?

18 There, I suspect, we will over time seek more
19 consistency in the result of the managed part. I don't know
20 yet what that is going to look like. Everyone has
21 acknowledged we are only part way here. It's not like we
22 put in the regulations the requirement for peak centerline
23 temperature in the fuel that is quite precise and ambiguous.
24 This is going to be different.

25 COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.

1 CHAIRMAN MESERVE: Any other questions or
2 comments?

3 [No response.]

4 CHAIRMAN MESERVE: I would like to thank both the
5 staff and NEI for a very informative briefing. This was a
6 remarkably smooth Commission meeting. It is wonderful to
7 have everyone headed in the same direction. I would like to
8 thank you all very much. I hope all our Commission meetings
9 are similar.

10 COMMISSIONER MERRIFIELD: Maybe you are an eternal
11 optimist too, Mr. Chairman.

12 CHAIRMAN MESERVE: With that, we are adjourned.

13 [Whereupon at 10:27 a.m., the briefing was
14 concluded.]

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CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON DRAFT MAINTENANCE
REGULATORY GUIDE
PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Wednesday, November 10, 1999

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: Mike Paulus

Reporter: Mike Paulus

COMMISSION BRIEFING

MAINTENANCE RULE GUIDANCE

November 10, 1999

ACTIVITY SINCE THE MAY 5, 1999, MRULE COMMISSION BRIEFING

The Rule:

- **May 13 -- SRM directing staff to continue rule revision, seek review of the draft regulatory guide by CRGR and ACRS, and work in a collaborative fashion with stakeholders to produce a final regulatory guide for Commission approval.**
- **May 17 -- SECY 99-133 delivered the revised rule to the Commission.**
- **July 19 -- Revised rule published, to become effective 120 days after the guidance is published.**

The New Maintenance Rule Requirement:

§ 50.65(a)(4) -- Before performing maintenance activities (including but not limited to surveillances, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. The scope of the assessment may be limited to structures, systems, and components that a risk-informed evaluation process has shown to be significant to public health and safety.

Guidance Documents for the 50.65(a)(4) Revision:

- **NEI: Section 11, “Assessment of Risk resulting from performance of Maintenance Activities,” of NUMARC 93-01, “Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants”**

- **NRC: Draft Regulatory Guide DG-1082, “Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants,” a companion guide to Regulatory Guide 1.160, “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants”**

- **Objectives:**
 - **Endorse acceptable industry practices**
 - **Define optional scoping criteria**

Interactions with Stakeholders:

- **Held four public meetings with NEI on paragraph (a)(4) guidance issues**
- **Participated in an NEI public workshop on paragraph (a)(4) implementation and guidance**
- **Reviewed and commented on five revisions of the NEI guidance document**

Staff Plans:

- **Remaining Issues: None**
- **Finalize draft regulatory guide DG-1082 endorsing NEI revised Section 11 of NUMARC 93-01**
- **Issue DG–1082 for public comment**

Schedule:

- **11/30 -- Provide guidance package to the Commission for information.**
- **12/13 -- Notice in Federal Register beginning 30-day public comment period on draft guidance.**
- **01/12-01/26 -- Resolve comments; create final guidance.**
- **01/27-02/03 -- Package to OGC, ACRS, and CRGR.**
- **03/02 -- Meet with ACRS.**
- **03/14 -- Meet with CRGR.**
- **03/21-03/31-- Process final guidance to Commission for review and approval.**
- **120 days after Commission approval of guidance -- § 50.65(a)(4) changes become effective.**



November 10, 1999

Commission Briefing on Maintenance Rule Guidance

Ralph Beedle

Harold Ray

Tony Pietrangelo



Background

- July 99 final rule revision
 - required configuration assessment
 - required use of assessment results
 - allowed assessment scope to be focused through risk-informed process
- Industry drafted guidance for compliance with new provisions





Industry Objectives

- Attain NRC endorsement of industry guidance
- Attain stable and predictable field implementation
- Fulfill rule's promise as model for risk-informed, performance-based regulation

NEI

3



NUMARC 93-01, Section 11

- Latest draft forwarded to NRC on 11/8
 - Sets assessment scope at Level 1 PSA plus HSSCs identified by expert panel
 - Provides appropriate thresholds for managing risk
 - Codifies good practices employed by licensees

NEI

4

Next Steps

- Ensure common understanding of revised rule and guidance at the implementation level
 - Workshops, training, etc.
- Monitor and assess implementation to assure intent of rule is fulfilled

5



Conclusions

- Revised rule implementation off to a good start
- Revised rule encourages licensees to use risk-informed process
- Implementation feedback will shed light on prospects for risk-informed Part 50

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