

ORIGINAL
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Title: **BRIEFING ON 10 CFR PART 70**
PROPOSED RULEMAKING, "REVISED
REQUIREMENTS FOR LICENSING OF SPECIAL
NUCLEAR MATERIAL" --
PUBLIC MEETING

Location: **Rockville, Maryland**

Date: **Tuesday, August 25, 1998**

Pages: **1 - 102**

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING ON 10 CFR PART 70
5 PROPOSED RULEMAKING,
6 "REVISED REQUIREMENTS FOR DOMESTIC
7 LICENSING OF SPECIAL NUCLEAR MATERIAL"

8 ***

9 PUBLIC MEETING

10 ***

11 Nuclear Regulatory Commission
12 Room 1F-16
13 One White Flint North
14 11555 Rockville Pike
15 Rockville, Maryland
16 Tuesday, August 25, 1998
17

18 The Commission met in open session, pursuant to
19 notice, at 10:00 a.m., the Honorable SHIRLEY A. JACKSON,
20 Chairman of the Commission, presiding.
21

22 COMMISSIONERS PRESENT:

23 SHIRLEY A. JACKSON, Chairman of the Commission
24 NILS J. DIAZ, Member of the Commission
25 EDWARD McGAFFIGAN, JR., Member of the Commission

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1 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

2 JOE CALLAN, EDO

3 TOM BAER, NFS

4 JACK ALLEN, Westinghouse

5 CHARLIE VAUGHAN, GE

6 JOHN C. HOYLE, Secretary

7 KAREN D. CYR, General Counsel

8 JAMES TAYLOR, Executive Director for Operations

9 DR. CARL PAPERIELLO, NMSS

10 ELIZABETH TEN EYCK, NMSS

11 RICHARD MILSTEIN, NMSS

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P R O C E E D I N G S

[10:00 a.m.]

CHAIRMAN JACKSON: Good morning. Today we are going to be focusing on the staff's proposed revisions to 10 CFR Part 70, and we have several industry representatives who have come to provide their views regarding the proposed changes to Part 70.

Following their presentation, the staff of the NRC will brief the Commission on the details of its proposal for revising the requirements for the domestic licensing of special nuclear material found in 10 CFR Part 70.

The process to revise Part 70 began in 1993, and various aspects were presented to the Commission for resolution in 1996 and 1997. Today, my colleagues and I look forward to hearing from all presenters to assist us in resolving issues associated with the draft rule that is presented in SECY 98-185.

And so unless my colleagues have any remarks they would like to add at the moment, Mr. Fertel, I assume you are going to lead off. If you could introduce your colleagues.

MR. FERTEL: I will. Thank you, Chairman Jackson, and good morning, Commission McGaffigan, Commissioner Diaz.

I am Marvin Fertel of the Nuclear Energy Institute, and I am certainly pleased to be here today to

1 represent not only NEI, but all of the fuel fabrication and
2 enrichment companies that operated facilities licensed under
3 10 CFR Part 70.

4 With me at the table this morning at Dr. Tom Baer,
5 who is the VP for Safety and Regulatory Activities at
6 Nuclear Fuel Services; Mr. Charlie Vaughan, who is the
7 Manager for Strategic and Regulatory Planning at General
8 Electric; and Mr. Jack Allen, who is the Plant Manager for
9 the Westinghouse Columbia facility. And I think with the
10 expertise sitting with me here, hopefully, we will be able
11 to answer any questions that you might have from a safety,
12 regulatory, or operational perspective as this dialogue goes
13 on.

14 I would also like to point out that there are
15 representatives from all the fuel fabricators and enrichers
16 present today in the audience.

17 On behalf of the Nuclear Energy Institute's
18 Facility Operations Committee, I would like to thank you for
19 the opportunity to appear before you again to discuss the
20 ongoing rulemaking to amend 10 CFR Part 70.

21 As you are aware, we have been working for several
22 years, and Chairman Jackson mentioned 1993, which makes it
23 at least five years right now, with the NRC staff to develop
24 a set of modifications to Part 70 which would improve the
25 regulatory process and enhance protection of the public

1 health and safety at our facilities without imposing
2 unnecessary burdens on industry or the NRC.

3 Prior to receiving SECY 98-185, the staff's most
4 recent draft rulemaking package, we believed that we were
5 making reasonable progress in closing the gap between the
6 staff's perspectives and our own. We had planned to present
7 to you today a sense of significant progress and to identify
8 those few important issues which remain for resolution.

9 We have not yet fully digested all of the detail
10 in the very extensive rulemaking package. It is voluminous
11 and involves many new and complex concepts such that making
12 it difficult for us at this time to make informed judgements
13 as to its implications in a single rulemaking.

14 For example, within the SECY there are new
15 requirements and criteria governing worker safety, new
16 reporting requirements, new design criteria for new
17 processes or facilities, new provisions for the conduct of
18 preliminary ISAs, new procedures for licensee changes, and
19 new criteria related to criticality safety. Any of these
20 concepts in and of itself could justifiably be the subject
21 of an individual rulemaking proceeding.

22 We have, however, performed a sufficient review of
23 SECY 98-185 to conclude that much of the progress we thought
24 had been made was illusory. That, (2), the rulemaking
25 package, particularly the draft standard review plan, is a

1 significant departure from how we understood our rulemaking
2 petition was being dispositioned. (3) If implemented using
3 the proposed SRP, the rule will focus many industry and
4 staff resources away from significant safety issues. And
5 (4), the package deviates from the guidance provided with
6 the Commission in its August 22, 1997 SRM.

7 We cannot hide our sincere disappointment with the
8 package we received. To understand our concern, it is
9 important to recount some of the history of our interactions
10 on this issue.

11 CHAIRMAN JACKSON: Let me stop you for a moment,
12 Mr. Fertel.

13 MR. FERTEL: Yes, Chairman.

14 CHAIRMAN JACKSON: Can you be more explicit in
15 terms of what respect or respects do you feel the proposed
16 rule differs from the guidance?

17 MR. FERTEL: Yes, I can. And I will in here, but
18 the primary area where it does that is the staff has
19 included a significant amount of prescriptive, programmatic
20 safety criteria.

21 CHAIRMAN JACKSON: Is that in the rule or in the
22 documents?

23 MR. FERTEL: It is in the SRP. It is the Standard
24 Review Plan.

25 CHAIRMAN JACKSON: Standard Review Plan.

1 MR. FERTEL: Yes.

2 CHAIRMAN JACKSON: Yes.

3 MR. FERTEL: It is not in the rule itself, but it
4 is in the SRP. And that is the one major area where we
5 think it deviates. We think that another area is they are
6 consistent with the guidance offered by the Commission,
7 though we request that the Commission, maybe after we
8 finish, consider whether or not you want to offer them new
9 guidance in a couple of areas. So they are not totally
10 inconsistent with the guidance in the SRM, but they clearly
11 are, in our opinion, on the imposition of major programmatic
12 safety requirements.

13 CHAIRMAN JACKSON: And you are going to talk in
14 more detail about those?

15 MR. FERTEL: Yes.

16 CHAIRMAN JACKSON: Okay.

17 MR. FERTEL: The last time we appeared before the
18 Commission, on July 2, 1996, we expressed strong concern
19 regarding the existing draft Part 70 revisions, as well as
20 the draft standard format and content guide and the standard
21 review plan.

22 One of our most significant comments was that the
23 rulemaking package, including the format and content guide
24 and the SRP contained a large number of new programmatic
25 criteria. Those documents contain new guidelines for NRC

1 review and approval of our various safety programs in areas
2 such as quality assurance, maintenance, training and
3 criticality safety.

4 Many of those guidelines went well beyond existing
5 programs and were not, in our view, justified on the basis
6 of health and safety. Up until our July 2nd meeting with
7 you, the industry had argued that no changes in Part 70 were
8 necessary. On July 2nd we modified our position and
9 embraced the staff proposal to require the performance of
10 integrated safety assessments. I think they call them
11 integrated safety analyses now.

12 We concluded that by adopting the ISA, the safety
13 basis of the facilities would be more clearly defined. The
14 licensee's and the NRC's attention would be focused on the
15 most important safety issues, and it would provide for
16 implementation of a graded risk-informed, performance-based
17 safety program.

18 In embracing the ISA concept, however, we urged
19 the Commission to eliminate the references to these new
20 multiple safety programs as premature and unnecessary. We
21 believe that a rule should be written to require the
22 performance of ISAs and to require licensees to modify their
23 plants and activities to address any vulnerabilities
24 identified as a result of those ISAs.

25 Our rulemaking petition proposed to implement this

1 approach, but we concluded that promulgation of a wide range
2 of new prescriptive safety program criteria would not be
3 part of the rulemaking package.

4 In SECY 97-137, the staff discussed its proposed
5 disposition of our rulemaking petition and stated that, "In
6 response to licensees' concerns, staff is now proposing
7 that, rather than require multiple safety programs,
8 licensees have the flexibility to determine, based on the
9 ISA results, the specific elements of the safety programs
10 that would be needed."

11 The Commission's SRM dated August 22, 1997
12 approved the staff proposal to revise Part 70, as requested
13 by the NEI petition, with the modifications described in
14 SECY 97-137. On that basis, we assumed that the current
15 rulemaking package would focus on the ISA and on the need to
16 address vulnerabilities identified in the ISA, but would not
17 contain a wide range of new prescriptive safety program
18 criteria.

19 CHAIRMAN JACKSON: What are you calling -- are you
20 calling -- what are you calling -- give us some examples of
21 what you are calling --

22 MR. FERTEL: In the SRM itself, Chairman Jackson,
23 there is at least the expectation, from the experience that
24 we have in dealing with the regulatory process, that if I
25 identified a particular high risk safety system in my

1 facility, that as the reviewer here looked at what I should
2 be doing for it, they would, in QA-1, which is what they are
3 including in the SRM and the SRP, they would require me to
4 use a systematic approach to training, which may or may not
5 be appropriate or that case. And they would basically have
6 prejudged the nature of the QA, the training program and
7 other programs that I should be using for a high risk
8 system.

9 What we would have expected, and I think that
10 maybe the staff would say this would still happen, but these
11 are the words that they have in the SRP.

12 CHAIRMAN JACKSON: I guess what I am really trying
13 to make sure I understand is, are you -- is your fundamental
14 point that there are a number of additional prescriptive
15 requirements in the standard review plan that go beyond the
16 ISA? Or are you talking about the ISA itself. I just want
17 to be clear.

18 MR. FERTEL: We are talking about prescriptive
19 program requirements in the standard review plan that would
20 be applied if my ISA identified a high risk system, or
21 process, or activity. So we are actually okay, in general,
22 on how the staff wants to do ISAs. We have a problem with
23 whether the ISA goes in the license or not. But as far as
24 how to actually do an ISA, I think that that is an area
25 where the industry and the staff have made very good

1 progress and are, basically, in very good agreement.

2 It is when I finish doing it and I determine that
3 this class is a high risk class, and I am now sitting down
4 to say, okay, am I treating it correctly within my plant
5 operation and program space as far as the way I am training
6 Charlie to operate it, or I am looking at the QA program
7 that I am putting on it. We would say we ought to look at
8 that, we ought to come up with what makes sense, and it may
9 or may not be a systematic approach to training approach in
10 this case. It may or may not be in QA-1. It likely
11 wouldn't be in our mind in many cases.

12 But right now, if I look at the SRP, the test, the
13 hurdle, would be, okay, how are you applying in QA-1 to that
14 particular class? How are you applying your systematic
15 approach to training to that class?

16 CHAIRMAN JACKSON: So, I mean is the problem
17 having to do with the degree of prescription in terms of how
18 to resolve a vulnerability or address a vulnerability?

19 MR. FERTEL: I think that is an appropriate and
20 correct characterization of the problem.

21 CHAIRMAN JACKSON: Okay.

22 COMMISSIONER McGAFFIGAN: Just to follow-up on
23 that, going back to this point as to whether the ISA is in
24 the license or not, it also is who is in charge of the
25 process of figuring out how to respond, right? You don't

1 want us second-guessing every judgment, as I understand it,
2 or every engineering change that you make that might be
3 above a 50.59 threshold. And so it is a question of, if it
4 is not in the license, if you do the ISA, you respond to it,
5 you are responsible for doing that much, but if -- but we
6 are not second-guessing every judgment you make in response
7 to your ISA.

8 MR. FERTEL: Yeah, I think that's accurate, too,
9 Commissioner, that we don't want you second-guessing. Now,
10 we certainly do want you to approve those particular actions
11 that you should approve and we are not at all opposed to
12 license conditions that would make all the ISA information
13 available. I think the problem with the ISA and the license
14 is it is adding, you know, thousands of pages of material,
15 and, in many cases, lots of material that -- you know, how
16 do you sort through to find out what is important as part of
17 your license, and it is an administrative nightmare for
18 handling. These facilities, when you go visit them,
19 thousands of pages.

20 CHAIRMAN JACKSON: Well, let me just understand.
21 Is the rub, with respect to this specific issue, an
22 administrative one, or is it that you are concerned that it
23 triggers requirements? Because, presumably, if you have to
24 do an ISA, you know, as a condition of getting a license,
25 and it has to be maintained in some way, and has to be

1 updated and so on, because if it is not, it is useless, all
2 of that is going to occur anyway. And if there are
3 thousands of pages associated with it, there are thousands
4 of pages associated with it.

5 But, so I guess I really want to understand, is
6 the fundamental rub an administrative issue, or it is that
7 you are concerned about requirements that may be triggered
8 as a consequence?

9 MR. FERTEL: It is both. And administrative is
10 probably making it sound too trivial. It is not so much
11 administrative and Xeroxing another thousand pages, because
12 that certainly can be done. What it is, is if I am going to
13 keep it up to date as part of my license, and every time
14 have to make a decision whether it is a license amendment,
15 whether or not that is really important or not, if I am
16 going to have to implement a 50.59 equivalent process for
17 these facilities, which they have never had, nor seem to
18 need, am I creating something that, again, diverts, in this
19 case, relatively limited resources at these facilities?

20 CHAIRMAN JACKSON: No, I understand the point you
21 are making. But are you -- you are not arguing that it
22 should not be updated?

23 MR. FERTEL: Absolutely not. And we are not
24 arguing that it shouldn't be available. We think it
25 definitely should be available.

1 CHAIRMAN JACKSON: And so the real question has to
2 do with mechanism?

3 MR. FERTEL: Yes.

4 COMMISSIONER DIAZ: It can be docketed but it is
5 not part of the license, that is what you are saying? It
6 can be an available --

7 MR. FERTEL: Certainly available, and certainly
8 used. And we don't have any problem with using it, even in
9 enforcement space, correctly. We are just trying to keep it
10 simple.

11 CHAIRMAN JACKSON: Well, as simple as the
12 complexity of it allows. All right. Okay.

13 MR. FERTEL: Let me see, I'll pick up somewhere
14 and skip a couple of things.

15 Okay. In addition to the problem that we have
16 raised with the apparent imposition --

17 CHAIRMAN JACKSON: Excuse me.

18 COMMISSIONER MCGAFFIGAN: There was one other
19 question I meant to ask on this slide that you were on, the
20 history of interactions. In 1996, in July of '96, it sounds
21 like at that point there was a standard review plan that you
22 all had access to and that you didn't like, and there was a
23 Commission, before my time, and you had discussion.

24 There are now, in this SECY document, you have
25 seen the new standard review plan, and apparently, that,

1 again, is causing great concern.

2 What, in that intervening two-year period, what
3 was the nature of the interaction on the standard review
4 plan? Did it evolve? Did you all have some insight into
5 it?

6 You know, as a general matter, I'll tell you where
7 I am coming from, in the reactor space, we seem to work best
8 when these guidance documents are discussed back and forth
9 between NEI and the staff in public. FSAR update, we now
10 are relying on 98 -- NEI 98-03 as the basis for, hopefully,
11 resolution there. We are hoping to do similar things in
12 other reg. guides.

13 But in this case, from '96 to a few days ago, or a
14 week ago, had you seen the SRP?

15 MR. FERTEL: We hadn't. From '93 to '96 there was
16 a lot of interaction between the industry and the NRC on
17 development of the standard review plan that evolved to that
18 point. NRC held a number of open meetings where the
19 industry came in and made presentations on draft sections of
20 the SRP. And I think during all those meetings, there was a
21 consistent drumbeat, at least from our side, that you are
22 getting too prescriptive and back off. And what came out in
23 the '96 time frame, when we appeared before the Commission,
24 was, well, we hadn't won those arguments and it was still
25 there.

1 From '96 till now, the real focus of the
2 discussion has been on the other issues of where should --
3 How do you do an ISA? What do we think about, you know,
4 what is an ISA? And, again, there was very good agreement
5 that has been reached there. What type of criteria should
6 you have for the radiation side? And I think there has been
7 very good agreement there.

8 And we didn't get very good agreement on where the
9 ISA should go, whether it is in the license or not, but
10 there was a lot of discussion. We had a lot of discussion
11 on the applicability of the backfit rule. We did not see
12 the SRP until this SECY was released, nor did we discuss it.

13 CHAIRMAN JACKSON: Let me make sure I understand,
14 though, you know. So that you have had open interactions.

15 MR. FERTEL: Very much so.

16 CHAIRMAN JACKSON: It is just that the open
17 interactions have no focused on the SRP.

18 MR. FERTEL: That's correct.

19 CHAIRMAN JACKSON: Okay.

20 MR. FERTEL: And it may have been erroneous on our
21 part to assume that the SRP was going to end up absent some
22 of these things. And I think maybe that was why the
23 visceral reaction when we saw it was not good.

24 CHAIRMAN JACKSON: Okay. So, I mean -- because
25 there is an implication that there was a deliberate attempt

1 to keep you from seeing the SRP.

2 MR. FERTEL: I have no basis for that, that was
3 just the process.

4 CHAIRMAN JACKSON: It is just the process that you
5 --

6 MR. FERTEL: Yes.

7 CHAIRMAN JACKSON: You were interacting.

8 MR. FERTEL: Very much so.

9 CHAIRMAN JACKSON: It is just that the SRP was not
10 the focus of most of those interactions, is that correct?

11 MR. FERTEL: Yes.

12 CHAIRMAN JACKSON: You were going to make a
13 comment.

14 DR. BAER: No, that was correct.

15 CHAIRMAN JACKSON: Right. Okay.

16 MR. FERTEL: Yeah. In addition to the problem
17 that we do have with the programmatic requirements, which
18 are related to the SRP, we continue to have disagreements
19 with the staff on the proposal on whether to include the ISA
20 results in a license, their opposition to the inclusion of
21 an immediately effective backfit provision and the inclusion
22 of consequence criteria that focus on purely chemical
23 hazards, and we are going to talk some more about all of
24 these.

25 Based on that, we have concluded that the proposed

1 rulemaking package is substantially the same as the prior
2 draft to which we objected back in 1996, even though, again,
3 I would say that on the ISA, we are clearly in much more
4 agreement than we ever were, and even in the radiation
5 criteria.

6 As the Commission is moving to improve and
7 simplify its regulatory process overall, we believe the
8 proposed Part 70 rulemaking package would significantly
9 increase both complexity and burden on the licensee, and the
10 NRC. It would do so for facilities that have an excellent
11 safety record, and really pose extremely low public health
12 and safety risk. And we believe there is simply no need for
13 dramatic change in the Part 70 regulations.

14 ISAs should be conducted and licensees should be
15 required to correct any vulnerabilities that may emerge.
16 The ISAs should be kept up to date, and the NRC should --

17 CHAIRMAN JACKSON: Let me ask you a question.
18 What would be the basis of that requirement?

19 MR. FERTEL: We would support a license condition
20 that says I must have an ISA. We would support a license
21 condition that tells us that we must keep it up to date. We
22 would support a license condition that says it must be
23 available for inspection and review by NRC.

24 CHAIRMAN JACKSON: You are taking all of this
25 down, right?

1 [Laughter.]

2 COMMISSIONER MCGAFFIGAN: That much -- do you need
3 a new rule for? Or could we, under the existing Part 70,
4 just say these license conditions will be expected when
5 somebody renews a license? And just put them into a
6 document that says when you review future --

7 CHAIRMAN JACKSON: It is not an explicit
8 regulatory requirement, so you would have a question in
9 terms of --

10 MR. FERTEL: You would have that question. I
11 mean, not wanting to beat it to death, but I mean the staff
12 has been imposing those as conditions of every license
13 renewal. So Chairman Jackson is correct, but, clearly, the
14 process works in other ways.

15 And, again, I think, Commissioner McGaffigan, a
16 simple rule would probably legitimize what is going on in
17 practice, which, in most cases, we are honestly willing to
18 support.

19 COMMISSIONER DIAZ: Is this -- it would work
20 something like, you know, the maintenance rule in a certain
21 way, maintaining configuration control, but without having
22 to keep, you know, the process at every step, very, you
23 know, scrutable, but you have to comply with it, you have to
24 make sure that information is available so the staff can
25 check that you actually --

1 MR. FERTEL: I think that is not a bad analogy,
2 Commissioner Diaz.

3 MR. VAUGHAN: No, in fact, that is very good,
4 because at the operating level, the operator has to
5 understand what the configuration is to manage their
6 operation. And we have indicated time and again that, at
7 the sites, that information would be available for the NRC
8 either to review or inspect, or whatever their desire is.

9 COMMISSIONER DIAZ: So those requirements express
10 for your facilities -- that requires that you maintain,
11 according to the ISA, the configuration management would
12 actually maintain the safety aspects of your facility and be
13 scrutable.

14 MR. FERTEL: Yes, very much so. Again, I don't
15 think in philosophy, we are really at odds with even the
16 staff. I think that it is in implementation mechanisms and
17 processes, and I think that the Commission is offering
18 suggestions that are very consistent with ways that we would
19 think you could implement. Because we are not arguing
20 against any sort of accountability here, or using the ISA
21 appropriately. That is not in debate on our side.

22 CHAIRMAN JACKSON: Okay.

23 MR. FERTEL: In support of the proposal that the
24 staff has put out, they discuss incidents, many of which
25 have been, in our opinion, mischaracterized at operating

1 facilities, and all of which have occurred years ago.

2 Maybe most important is they don't adequately
3 account for the changes that have occurred in the
4 intervening years. While the Part 70 regulations themselves
5 have not substantially changed, the rigor of their
6 implementation has substantially increased. And I think
7 this goes to Commissioner McGaffigan's statement that, in
8 essence, a lot of this is already happening, though maybe
9 the rule doesn't give it all the regulatory legitimacy it
10 should have.

11 A wide range of NRC staff initiatives undertaken
12 under the existing rules, including enhanced criticality,
13 safety reporting, more rigorous inspections and updated
14 guidance on management oversight and chemical safety have
15 increased the NRC's focus on chemical hazards, fire
16 protection and nuclear criticality safety. These are the
17 concerns which originally prompted calls for amending the
18 regulations.

19 Beyond this, during the last license renewal
20 cycle, most Part 70 licensees agreed, as a condition of
21 their license, to perform an ISA on a set schedule. The
22 acceptance of an ISA condition demonstrated that both the
23 NRC and the NRC recognize the valuable tool an ISA can be.

24 Furthermore, industry initiatives have resulted in
25 a fuel fabrication industry that is safer than it was ten

1 years ago. Those initiatives include improvements in the
2 level and quality of documentation of nuclear criticality
3 safety analyses, improved configuration management programs
4 and better unusual event identification and root cause
5 analysis.

6 Together, the staff and industry initiatives have
7 resulted in better understanding of plant safety bases and
8 more rigorous application of programs important to safety
9 within the current Part 70 regulations.

10 COMMISSIONER DIAZ: Excuse me. The term "safer"
11 just caught my eye and ear. Would you elaborate on that?
12 How much safer is safer? Can you give me a ballpark?

13 MR. FERTEL: It would have to be qualitative. I
14 think that in almost all the facilities, Commissioner Diaz,
15 what has happened is the rigor at look root cause analysis
16 has gotten much better. The configuration management
17 control systems have gotten much better.

18 The implementation of 91-01 as a reporting
19 mechanism has helped share across the industry, maybe more
20 effectively, information. So it is more of a qualitative,
21 because we are not quantifying.

22 And I think, you know, my background is much more
23 reactors than the Part 70 licensees, and it took me a while,
24 sitting with my friends here, and various meetings, to
25 understand the nature of their risk, and they very different

1 than reactor risks. It is really hard to cause something
2 off-site. So when we are talking safer, it is safer in
3 avoiding any type of event, not a health and safety threat.

4 COMMISSIONER DIAZ: Besides the difference in the
5 absolute, you know, between reactors. And is this -- have
6 the improvements in the fuel facilities comparable, start
7 with, you know, lower safety regs to those that have been
8 made in the reactor side?

9 MR. FERTEL: I would tend to say yes. I mean
10 there's a lot more rigor at the reactor sites and things
11 like PSAs, and, you know, just the nature of the beast that
12 you are working with. And event here, you know, it's hard
13 to say as, you know, the bar keeps getting raised.

14 COMMISSIONER DIAZ: Okay.

15 MR. FERTEL: I don't know if anybody here at the
16 table, Jack, or Tom, or Charlie, would like to say
17 something.

18 DR. BAER: Commissioner, it is very difficult to
19 have a dramatic improvement in something that is already at
20 a safety level where incremental changes cause, on a
21 percentage basis, large amounts. At our facility, there are
22 essentially no accident sequences that would produce a
23 significant off-site impact. So we are already starting
24 below the limits that have been set in the regulations.

25 COMMISSIONER DIAZ: I understand that. I was

1 referring to the fact that if configuration management and
2 all of the other processes have increased in quality and
3 effectiveness, you know, as they have in reactors, that even
4 your very safe levels will be at a much higher level of
5 safety. And I was questioning what those improvements are,
6 and I am really not familiar.

7 MR. VAUGHAN: I think from the operating plant
8 standpoint, I can't compare it to reactors because I don't --
9 you know, I am not qualified to do that, but in our
10 businesses, I think the lessons that we have learned in the
11 last few years, and have tried to implement, one of those is
12 the lesson of configuration management. And you have to
13 have configuration management to keep your programs in tune.
14 And we have made lots of changes in that regard. And, also,
15 kind of as a spin-off of that, or a result, there has been a
16 lot of improvement in the internal documentation that
17 describes your basis for safety and what is important to
18 assure that those protective measures are in place.

19 I believe the next milestone, if you want to go
20 farther than what we have pretty much done voluntarily, is
21 --

22 CHAIRMAN JACKSON: Let me take you up on the issue
23 of voluntarily. The question is what drove the changes.
24 And I mean it seems like I heard a combination of things,
25 industry initiatives, more rigorous implementation of the

1 existing Part 70, and lessons learned on both the industry
2 and the agency side in terms of learning from incidents and
3 so on that occurred over the years. And so it strikes me
4 that it seems to be a kind of a potentiating thing, that not
5 all of these were just totally voluntary from the beginning.

6 MR. VAUGHAN: Yeah, you are correct. There's a
7 lot of interaction. But we learned a number of lessons from
8 what was happening at our plant, and there was a sensitivity
9 driven by the NRC to those kinds of things. So it was clear
10 that we needed to learn the lesson. And the inspection
11 program continues to point out places that we miss the mark,
12 and we take that very seriously and learn from those, too.
13 So it is an interactive process.

14 COMMISSIONER MCGAFFIGAN: Could I ask what has the
15 trend been in 91-01 reports? In the 96 document,
16 attachment, there apparently was a downward trend, and I was
17 wondering whether that had continued in 97, in 91-01, you
18 know, the reports that you all voluntarily, or whatever,
19 submit in response to the information notice.

20 MR. ALLEN: I would say that from the Westinghouse
21 experience, that they are increasing, that there is more
22 involvement, more reporting as we have gone through various
23 situations, and I think it is because of the interactions,
24 that it has not truly been voluntary in some respects and it
25 has been interactive. So there's -- I would say that it has

1 been an increase.

2 COMMISSIONER MCGAFFIGAN: But does 91-01, I have
3 not honestly read the bulletin, does it -- are these
4 precursor type reports that you have to report on, or does
5 that mean the number of precursors is increasing? Or does
6 it just mean that you are getting down and finding more?

7 MR. ALLEN: I think it is the latter, in the case
8 -- I think we are being more deliberate about the license
9 requirements, understanding the license requirements, the
10 timing of reporting and the specifics. In some cases it
11 goes to the point of the prescriptiveness of some of the
12 requirements that we are talking about. I think that is
13 what has driven a lot of the reporting.

14 I would just like to also comment that in the case
15 of our customers and the quality requirements, there are --
16 in QA-1, there are ISA requirements. It is not
17 prescriptive, and yet we have enhanced our quality systems
18 and work closely with our customers, and you have in
19 regulating them, done the same.

20 And so back to what Commissioner Diaz was talking
21 about, in terms of an improvement in safety, I would say
22 that the improvement in safety that we have seen is
23 commensurate with the enhancement in the product quality.
24 And so we have seen that kind of level of improvement that
25 has been generated. And so those are the two points I would

1 make relative to prescriptive improvements.

2 MR. FERTEL: Tom, do you want to say anything in
3 response to Commissioner McGaffigan's question on 91-01?

4 DR. BAER: It's not a fair comparison for at NFS,
5 because two years ago we were not operating. Today we are
6 operating. We have made a couple of 91-01 reports. We
7 don't believe that it is an indication of precursor. It
8 means it is because we are looking very closely at the
9 operations and what we have. And we have used the 91-01
10 process to help us identify things, and that view, that
11 process has helped us to be more rigorous in our own
12 approach.

13 CHAIRMAN JACKSON: Let's go on.

14 MR. FERTEL: I think just the last point which is
15 relevant to maybe the discussion we just had is that all the
16 NRC license performance reviews at the fuel fab facilities
17 over the last couple of years have confirmed the safety of
18 the operations there, and I think that it is an evolving and
19 maturing thing as maybe you do reporting under 91-01.

20 Clearly, we endorse safety enhancements that are
21 achievable at reasonable cost to the industry and the NRC
22 and which are commensurate with the safety benefits. We
23 don't believe that costly major regulatory changes are
24 required and we have said that since 1996. And we view the
25 new programmatic criteria set forth, primarily in the draft

1 SRP, as costly and unnecessary. And on that basis alone, we
2 have a problem with supporting going forward with the rule
3 as currently written, if it is supported by that SRP.

4 CHAIRMAN JACKSON: So it is really the SRP that is
5 the big rub?

6 MR. FERTEL: That is clearly the eye-opener when
7 we began to look at it, in all honesty, and we talked about
8 this yesterday a bit, that the package is really pretty
9 voluminous. And we have problems with the regulation of
10 purely chemical hazards, which we will talk about a bit, and
11 we think we should have some discussion on, and we have the
12 problems that we carried over on how the ISO -- ISA, I'm
13 sorry. I am thinking of the system operators these days.
14 The ISA, whether it is in the license or not.

15 But the thing that caught our attention was the
16 imposition of what looked like just a monstrous set of
17 programs that, again, may or may not be appropriate. And
18 that's only a question. We are not saying we would never do
19 those. What we are saying is they shouldn't be just
20 prescriptively imposed.

21 We believe that our approach -- sorry.

22 CHAIRMAN JACKSON: Oh, no, no.

23 MR. FERTEL: We believe that our approach provides
24 the necessary improvements to the regulatory process
25 contained in the staff proposal, at far less cost. We are

1 concerned that the cost estimates contained in SECY 98-185
2 substantially underestimate the burden on both industry and
3 the NRC.

4 Our basis for that concern is the experience of at
5 least one licensee, and keep in mind, there aren't very many
6 in this particular community, where as much as 70 percent of
7 the ISA is completely and where there is actual cost data
8 available. The cost greatly exceeds the regulatory analysis
9 estimate.

10 We also base our opinion on experience in recent
11 license renewal proceedings in which the staff has
12 prematurely, and maybe inappropriately, applied the guidance
13 set forth in the draft SRP as licensing standards. Aside
14 from our concern with the rulemaking itself, this is a
15 practice which we would strongly disagree with, and one
16 which highlights, in our opinion, the need for a backfit
17 provision, which Tom will talk about in a minute.

18 What I would like to do now is have Tom Baer talk
19 about some of the specific issues that we had thought we
20 would be raising before you today until we saw the SRP,
21 which sort of changed our tack a little bit, but it is
22 probably the ones that the staff also felt that we and they
23 were in somewhat disagree on coming into this meeting. And
24 I think that while there is that disagreement, those
25 discussions have been constructive, though maybe not

1 conclusive.

2 DR. BAER: Good morning, Chairman Jackson,
3 Commissioner McGaffigan, Commissioner Diaz. The first topic
4 I will be discussing is the inclusion of the ISA results in
5 our licenses.

6 After extensive discussion with the staff, we have
7 not been able to reach agreement on the inclusion of ISA
8 results in the license. The staff believes that the results
9 or output from the ISA process should be physically
10 incorporated into the Part 70 facilities licensees. The
11 draft proposal is not appropriate because it creates an
12 excessive burden in managing extensive information, much of
13 which is commercially sensitive, requires significant
14 administrative support and focuses significant NRC and
15 licensee resources away from safety at the facilities.

16 CHAIRMAN JACKSON: Let me ask you this, if the ISA
17 were to be docketed, had to be maintained, were used as part
18 of regulatory decisions, tell me where the cost comes in so
19 I can really understand between whether it is in the license
20 or not in the license.

21 DR. BAER: It is back to what can we change once
22 something is in the license.

23 CHAIRMAN JACKSON: Okay.

24 DR. BAER: So if I go to make minor changes in my
25 plant --

1 CHAIRMAN JACKSON: So it is the change process and
2 how onerous it is if it is in the license.

3 DR. BAER: It essentially eliminates our ability
4 to make minor modifications to the plant.

5 CHAIRMAN JACKSON: So let me understand. So the
6 point is really it is the change process for it if it is in
7 the license versus not being in the license. Is that what
8 you are basically --

9 DR. BAER: That is a major part of it, yes, ma'am.

10 CHAIRMAN JACKSON: Okay. Okay.

11 DR. BAER: It is not necessary because the
12 information is available at the plants in the proper
13 context. The information is not necessary for the NRC to
14 exercise enforceable authority.

15 CHAIRMAN JACKSON: Let me ask you this, if the ISA
16 were available in the plants, but not to the licensing
17 staff, which is here, how would the process work in terms of
18 if there were some need to evaluate it relative to some
19 change in the license or change in the plant?

20 DR. BAER: We have had several visits from the
21 licensing staff to come to our facility and have looked at
22 the detailed documents we have provided.

23 CHAIRMAN JACKSON: So you are talking about not
24 docketing it at all.

25 DR. BAER: Not docketing the entire ISA, but,

1 certainly, we would consider docketing, certainly, a
2 summary, docketing the results. The summary information
3 would certainly address those items that are safety
4 significant, but a complete ISA addresses literally
5 thousands of scenarios, many of which are not safety
6 significant.

7 COMMISSIONER MCGAFFIGAN: Could I -- I am just
8 trying to tie down. The staff and the SRP talk -- shows a
9 model license application and the level of detail that they
10 expect encapsulating the results of the ISA. And you don't
11 want to do that in the license and have that incorporated in
12 the license. But what they describe in the SRP in the way
13 of results, is that level of detail that you would imagine
14 docketing? Or is that -- is that excessive, what they are
15 asking for in the SRP even to be docketed? I am trying to
16 tie down --

17 DR. BAER: The level of detail that they ask for
18 in the example is beyond what most licensees had anticipated
19 docketing.

20 COMMISSIONER MCGAFFIGAN: Okay.

21 MR. ALLEN: I would also add that another part is,
22 in addition to the change process, the commercial
23 sensitivity of some of the information. Each of us runs
24 different processes.

25 CHAIRMAN JACKSON: I understand.

1 MR. ALLEN: So what we are down to is writing two
2 versions, one for public consumption and one for the
3 license. And so that becomes an onerous part of the
4 management of it.

5 MR. FERTEL: Just maybe to add one point, Chairman
6 Jackson. You had mentioned in a change process, how would
7 the licensing staff, if they didn't have it, do things. I
8 don't think anybody envisions not submitting sufficient
9 information on a change that requires NRC approval to the
10 licensing staff, but you would submit the information that
11 was relevant to that change as part of whatever ISA analysis
12 you may have done, et cetera.

13 CHAIRMAN JACKSON: Now, is there a need, though,
14 to have clarification on that as part of either, if it is
15 not the SRP, the rule itself? Because I do know there is,
16 you know, a historical issue having to do with back and
17 forth requests for additional information. The staff feels
18 it needs certain things. The licensee either doesn't have
19 it or doesn't want to submit it, and that causes a kind of
20 do loop. And so then, you know, either this Commission or a
21 successor Commission could be sitting around hearing
22 complaints about RAIs back and forth.

23 And so, you know, you try to fix one problem and
24 you end up with another one. And so there really needs, to
25 me, to be some clarification on this issue of how you handle

1 what is needed to make these kinds of decisions.

2 I appreciate what you talk about in terms of
3 commercial sensitivity and what may be in the public domain
4 particularly. But I do believe this issue of what
5 information the licensing staff would need, you know, should
6 the need arise, and how that is to be obtained is a
7 non-trivial issue, because you don't want to -- because you
8 -- and so at the same time I am appreciative of this issue
9 of not having an overly onerous change process. But there
10 has to be some middle ground, you know, somewhere between
11 the two extremes, because the NRC staff does have to have
12 information to do its job.

13 DR. BAER: Yes. And we recognize that and we want
14 them to have all the information necessary to make good
15 decisions.

16 MR. ALLEN: And, in fact, have participated in
17 this process where each of our sites has been visited to
18 discuss the content, format and the process for handling
19 ISAs. So we have been very interactive and just would like
20 to extend that to resolve these issues.

21 MR. VAUGHAN: Chairman Jackson, I just wanted to
22 say that I think you are on a very important point there.
23 And there probably does need to be some clarification. It
24 seems that the NRC needs to relook at what tasks they are
25 giving the licensing people versus what tasks they are

1 giving their inspection people, because it seems like
2 programmatic approval might come at the licensing stage and
3 then confirmation and confidence is developed through
4 inspection. So I think you hit on a very good point there.

5 CHAIRMAN JACKSON: Well, that's true except when
6 they are changes to the licenses because of major changes to
7 a facility. And that -- I mean so it is not that the
8 licensing staff acts once and then from then on it is
9 strictly inspection. You know, and I don't know, you all
10 know more about the facilities than, obviously, we do. But
11 at some point, you know, there are issues that do propagate
12 back into licensing space. And so -- and that is really
13 what we are talking about here.

14 Yes.

15 COMMISSIONER MCGAFFIGAN: I am going to stay on
16 this theme of changes that require our approval. At the
17 moment is it clear in Part 70 what changes at the facilities
18 --

19 CHAIRMAN JACKSON: Do require.

20 COMMISSIONER MCGAFFIGAN: -- do require our
21 approval? And then, how big a difference would it be
22 compared to the proposed rule, which as I understand it has
23 a 50.59 type provision where we would capture all these
24 results of our ISA, and then if it is more than minimal
25 increase in safety or any new event, you all would have to

1 come in for a license? I am just trying to understand,
2 whatever the credere are today, how many amendment change
3 requests do we get? And under the new rule, how many change
4 requests are we likely to get?

5 MR. VAUGHAN: Part 70, now, I don't believe
6 addresses that particular subject, but --

7 CHAIRMAN JACKSON: Should it?

8 MR. VAUGHAN: In our licenses, we have sections in
9 our license that address that. The only problem that we see
10 there is the fact that the conditions are not always the
11 same, and maybe they shouldn't be. But I mean there's a
12 variation.

13 COMMISSIONER DIAZ: We agree with that.

14 CHAIRMAN JACKSON: Well, but that is the question.
15 I mean if it is license-specific, should it be? And if it
16 shouldn't be, should that be something that is addressed
17 here in terms of how, you know, what triggers?

18 MR. VAUGHAN: I personally I think you can handle
19 it either way you want to. You sometimes have a little bit
20 more flexibility -- I mean you regulate a number of
21 different licensees, not just us, and so if you look at the
22 larger picture, it might be better off to do it in licenses,
23 because that way you could tailor it to the particular kind
24 of license you are working with. On the other hand, if you
25 want to treat everybody exactly the same, then you write it

1 into the regulation.

2 COMMISSIONER MCGAFFIGAN: One of the problems we
3 run into reactor space, as you know -- or you probably don't
4 know, is treating everybody exactly the same sometimes gets
5 us into trouble, because we are alleged to be ratcheting
6 people down to the worst performers.

7 CHAIRMAN JACKSON: Yes, but at the same time,
8 treating everybody not the same also gets us into trouble.

9 COMMISSIONER MCGAFFIGAN: Right. Right.

10 CHAIRMAN JACKSON: We are alleged to be
11 inconsistent and so that's --

12 COMMISSIONER MCGAFFIGAN: It depends which
13 stakeholder you are listening to at the particular time.

14 CHAIRMAN JACKSON: It depends on the particular
15 situation.

16 COMMISSIONER MCGAFFIGAN: But, okay, back to my
17 question. You all have license conditions. In the license
18 conditions at the moment, you know when you have to come in
19 for a license amendment. That is fairly clear from the
20 license condition, not the rule, when you have to come in
21 and say this is a change that requires NRC approval, is that
22 correct?

23 MR. VAUGHAN: We feel like it is, yes.

24 COMMISSIONER MCGAFFIGAN: Okay. How many do you
25 have today and how many do you envision you would have to

1 have under this 50.59 rule, or like rule that we are
2 building into the new rule? I mean how -- you if you make
3 changes in your facility every year, how many would likely
4 have to come to us under the new rule?

5 MR. VAUGHAN: I am not sure, because there is not
6 exactly -- it is not like a routine thing, it is just when a
7 change comes up, and sometimes you will have several in one
8 year, and then you may go the better part of a year without
9 anything significant. So it doesn't seem to have a pattern.

10 But under the new approach, if you go down to the
11 level of requiring the ISA in the license and all of the
12 items relied on for safety in the license and all of that,
13 we, at our facility, process, and I imagine the others are
14 about the same, process about 800 facility change requests a
15 year. So 800 times in a year you are going to have to make
16 this decision about whether you have to come get an
17 amendment or not. And the requirements, as are being
18 proposed, are tight enough that some amount of that 800 are
19 going to have to come to the Commission. So -- and I just
20 can't you how many that is.

21 COMMISSIONER McGAFFIGAN: But just to get back to
22 the moment, there's 800. I am trying to tie down the
23 changes, 800 a year approximately. At the moment there is
24 some significance test in your license condition and you
25 recognize it when you see it. I mean you don't have an

1 elaborate process to decide whether each of these 800
2 changes require an NRC -- whether there is unreviewed safety
3 question that would then require a license amendment with
4 us, but you know it when you see it, so it must be a very
5 small subtraction, a handful per year, zero, it sounds, some
6 years, of the 800 that fit the criterion in your license
7 amendment.

8 You are saying the new rule will impose a process
9 where you have to look at each 800 document why you didn't
10 -- why it is not an unreviewed safety question and why it
11 doesn't breach this minimal threshold.

12 MR. VAUGHAN: Right. Right.

13 COMMISSIONER MCGAFFIGAN: And then a much larger
14 fraction, you are judging will have to come to us for prior
15 approval.

16 MR. VAUGHAN: Right. If my memory serves me
17 right, for example, we have had two such cases that we had
18 to come to licensing in the last year.

19 COMMISSIONER MCGAFFIGAN: Two out of 800,
20 approximately.

21 MR. VAUGHAN: Yes.

22 COMMISSIONER MCGAFFIGAN: Okay.

23 MR. ALLEN: But there is a rigorous process.
24 There is a very deliberate process in each of our facilities
25 for managing those process changes. And so there is a

1 scrutiny of those 800 and it is a documentation process, and
2 it undergoes a formal review. So I don't want to leave you
3 with the thought that there is not that type of scrutiny in
4 our facility.

5 CHAIRMAN JACKSON: Right. But I am guess what I
6 am trying to understand is the -- are you saying that the
7 way the rule, as it is currently structured, that it would
8 end up causing you to have a more onerous process for, you
9 know, deciding when to come -- whether something has to come
10 to the NRC?

11 MR. ALLEN: I don't think it would be more onerous
12 in deciding what to come. I think it would be more
13 decisions to come for a formal license change as opposed to
14 the process.

15 CHAIRMAN JACKSON: I see. So it is changing a
16 threshold?

17 MR. ALLEN: That's correct.

18 CHAIRMAN JACKSON: Okay.

19 DR. BAER: The draft proposal, we believe does
20 little to improve facility safety, places NRC prescriptive
21 requirements on the licensee, and would require major
22 license -- major amendments to our license by requiring that
23 potential accidents, items relied upon to prevent or
24 mitigate such accidents, and the measures to assure that
25 those items are available and reliable, all to be included

1 in the license.

2 We agree that all of this information resulting
3 from the conduct of the ISA process must be retained, used
4 by the licensee to manage the facility, and made available
5 for NRC licensing reviews and inspections.

6 The proposed requirement to which we object is to
7 include all of this detailed information in our license
8 applications and, ultimately, our licenses. The staff's
9 approach would dramatically expand the description of the
10 plant site, facilities, equipment, processes and controls.
11 Including this level of detail in our licenses is not
12 necessary for the staff to conduct effective inspection and
13 enforcement activities. To our knowledge, the NRC has never
14 required this type of information to cite violations when
15 they are warranted.

16 Furthermore, it would represent a significant
17 administrative burden for the licensees and the staff,
18 producing little measurable improvement and safety, and
19 diverting finite resources away from safety programs.

20 Our concerns in this regard are heightened by our
21 initial review of the staff's example of an ISA submittal
22 included in SECY 98-185, which suggests a level of detail
23 beyond what we had anticipated or believe to be appropriate.
24 The Commission should recognize that most of the Part 70
25 licensees already have committee to performing ISAs and have

1 those efforts well underway. Substantial rework would be
2 required if the staff's approach was adopted.

3 The staff's objectives can be achieved without
4 incorporating the detailed ISA results into the licenses.
5 Under NEI's approach, the regulation would require that we
6 include in our licenses, binding commitments to prepare and
7 maintain the ISAs, identify potential accidents, identify
8 the items relied on for safety, and maintain controls to
9 assure that those items are available and reliable. Through
10 these simple license conditions, the NRC would have the
11 ability to inspect and verify that ISAs are properly
12 performed and updated as facility changes are made, items
13 relied on for safety are identified, and appropriate
14 measures are maintained to ensure the availability and
15 reliability of such items.

16 Under our approach, the ISA results and
17 documentation would be fully available for NRC staff
18 licensing reviews and inspections. Enforcement action could
19 be taken for non-compliances with the rule, including
20 failure to perform an adequate ISA, failure to make
21 necessary plan or program changes or failure to maintain
22 those changes.

23 Thus, the benefits of the proposed amendments to
24 Part 70 can be realized if the rule requires the simple
25 license commitments we have proposed. We believe this

1 approach is moving toward the Commission's risk-informed,
2 performance-based regulations.

3 Now, turning to the backfit rule. Our next
4 concern involves the application of the backfit provision.
5 In NEI's rulemaking petition, we propose that a backfit
6 provision be included in Part 70 and that it should apply as
7 soon as the other Part 70 rule changes become effective.

8 The staff has proposed only to consider including
9 such a provision in Part 70 several years from now, after
10 the ISAs are complete, the results are incorporated into our
11 licenses and experience is gained with implementation of the
12 ISA requirement. Under this approach, a wide range of
13 costly new requirements, many of which are set forth in the
14 draft SRP, could be imposed without any site-specific
15 consideration of whether they are needed for compliance or
16 are justifiable on a cost benefit basis.

17 The staff previously proposed delaying the
18 effectiveness of a backfit provision in another context, the
19 certification of the gaseous diffusion plants under 10 CFR
20 Part 76. We have provided the history of the NRC's
21 decision-making process on that provision on our White Paper
22 on the Part 70 regulation.

23 We call to your attention to that history because
24 we believe that it clearly shows that the Commission
25 directed the staff to apply Part 76 backfit provision as

1 soon as Part 76 became effective, but the staff ha not done
2 so. The NRC certification of the gaseous diffusion plants,
3 without the benefit of a backfit rule, has resulted in
4 millions of dollars in plant program and procedure changes
5 at these plants, many of which may not have been justifiable
6 under the backfit rule. That experience strongly suggests
7 to us that inclusion of an immediately effective backfit
8 provision in Part 70 is essential and is consistent with
9 past Commission directives. The addition of the new
10 programmatic criteria beyond the content of the rule clearly
11 demonstrates the need for an operative backfit provision.

12 The next issue I will discuss --

13 CHAIRMAN JACKSON: Yes, go ahead.

14 COMMISSIONER McGAFFIGAN: Could I ask on this,
15 because I am one of the problems for you all on backfit? I
16 took down fairly carefully something Mr. Fertel said a few
17 minutes ago, that the industry supports safety enhancements
18 achievable at reasonable cost. My problem with the backfit
19 rules is they proliferate in our legislation, Part 76, Part
20 50, is that that isn't the test. It isn't safety
21 enhancements achievable at a reasonable cost. There is a
22 first -- that is in there, but first you have to have, and I
23 am reading it, a substantial increase. So a small increase
24 for a minimal cost or a trivial cost, under the backfit
25 rule, as I read it in Part 50 or Part 76, even, although you

1 say it has been waived there, I am not allowed to do that.
2 Small -- because it has to be a substantial increase in
3 safety in order to even consider it.

4 So I am open to backfit it if it were the Marvin
5 Fertel backfit, supporting safety enhancements achievable at
6 reasonable cost. But the backfit where you start with this
7 test that there has to be a substantial increase, not just a
8 good increase or whatever, that's where -- that's the
9 problem I am having with backfit. Because as I said in my
10 vote, and you know, you have seen my vote on the previous
11 paper, that substantial increase test, at times, I think,
12 prevents us from doing reasonable things at trivial cost.
13 And so, you know, if you are open to the wording of the
14 backfit rule, then you may find a somewhat more responsive
15 Commissioner. But this one you shouldn't blame the staff
16 for because I am at least one of the people who has --

17 CHAIRMAN JACKSON: Guilty.

18 COMMISSIONER McGAFFIGAN: -- urged the staff to go
19 in this direction.

20 [Laughter.]

21 CHAIRMAN JACKSON: Guilty as charged.

22 MR. FERTEL: Maybe, Commissioner McGaffigan, we
23 should look at it maybe in three tests. I mean there is
24 clearly the test of, is it a safety enhancement that is
25 required from the standpoint of satisfy either regulatory or

1 true, you know, risk standpoint? And I don't think there is
2 any question that NRC can impose that and licensees should
3 fulfill their obligation there.

4 I think then there is sort of the fork in the road
5 that you are going down, which is I am an operator and there
6 are some relatively inexpensive enhancements I can make that
7 get me some good, though not maybe not substantial, safety
8 improvement. I think that operators will do that if they
9 make sense, and it shouldn't be a regulatory imposition.
10 Because, again, we are -- in a reactor space now, we are
11 looking very hard at how should we do assessment of reactors
12 in a way that really builds risk-informed information into
13 it and creates some sort of assessment process where you
14 really do have different areas of regulatory involvement,
15 including some areas of just regulatory oversight and no
16 imposition potentially.

17 I think that that is, again, where you want to
18 stay out of areas where, gee, NRC thinks this is a good
19 thing, but it really isn't a substantial increase for the
20 dollars. I think that that is a point where it is beyond
21 the regulatory requirement for protection of public health
22 and safety. It may be something the operator wants to do
23 and should do, and maybe we would find they would do it more
24 often if they didn't think it would become a regulatory
25 requirement.

1 So I mean I think my advocacy would be to apply
2 the backfit provision systematically, the way the rule says
3 it should be applied, and you may find this sort of gray
4 area in between true regulatory requirements and true
5 backfit requirements being done maybe more at the
6 prerogative of licensees in some cases, or not, but still
7 not diminishing safety. I mean you are still well above the
8 safety threshold from a regulatory standpoint, or a safety
9 margin from a regulatory standpoint. So I guess I would
10 maybe argue that you could get more of what you want if the
11 backfit provision was implemented in a more rigorous way, as
12 currently written in 51.09.

13 COMMISSIONER McGAFFIGAN: Okay. Well, I think
14 there is more than a semantic issue there, and we can
15 continue the discussion.

16 CHAIRMAN JACKSON: Why don't we move along?

17 DR. BAER: The next issue that I will discuss this
18 morning involves the proposed consequence criteria. We are
19 pleased that SECY 98-185 includes criteria which generally
20 agree with those we had proposed in our petition. The ISAs
21 would evaluate potential event sequences against such
22 criteria and identify the items relied on to provide
23 reasonable assurance that such criteria will not be
24 exceeded.

25 However, the SECY appears to be proposing specific

1 consequence criteria governing concentrations of various
2 non-radiological chemicals that have nothing to do with the
3 safety of nuclear materials. This suggests to us that
4 licensees could be cited with violations for exceeding
5 purely chemical exposure levels.

6 As we read the proposed rule, if the established
7 chemical exposure levels are exceeded, a licensee would be
8 required to institute controls to prevent or mitigate those
9 exposures. In fact, the proposed rule will require
10 reporting of purely chemical exposures to the NRC.

11 While purely chemical exposure levels can be used
12 in the ISA process for determining whether those exposures
13 could affect the safety of license materials, they should
14 not themselves be used as consequence criteria. The
15 proposed rule would establish an unnecessary system of dual
16 regulation between the NRC, EPA and/or OSHA.

17 CHAIRMAN JACKSON: Well, you know, as you point
18 out here, that NRC and OSHA operate under a MOU.

19 DR. BAER: Yes.

20 CHAIRMAN JACKSON: And so I will ask the staff, in
21 terms of their criteria, how that plays off against the MOU
22 and whether, in fact, it has caused a problem. Does OSHA
23 regularly inspect your facilities?

24 DR. BAER: We, at our facility, have been
25 inspected within the last year by the Tennessee OSHA.

1 CHAIRMAN JACKSON: Okay.

2 COMMISSIONER McGAFFIGAN: I might just follow up.
3 You say here in your viewgraph it conflicts with the
4 NRC/OSHA MOU. That isn't as clear to me, as I read the MOU.
5 We are not supposed to -- it says NRC inspectors are not to
6 perform the role of OSHA inspectors. But then it also says
7 that they are going to be trained in order to enhance the
8 ability of NRC personnel to identify safety matters under
9 OSHA per view. OSHA will provide NRC regional personnel
10 with basic chemical and industrial safety training. And
11 then it says that they will -- that NRC/OSHA joint team
12 assessments are going to be carried out. Each agency will
13 make its best efforts to support such assessments at about
14 20 facilities once every five years.

15 As I understand it, we obviously do that. OSHA,
16 because of budget constraints, oftentimes doesn't. So what
17 we have here is an awkward situation where we have some
18 responsibility under a MOU. We are not OSHA, but we have
19 some responsibility to identify issues. And OSHA doesn't
20 have the capability to, or the personnel resources to
21 inspect as often. So how much of that should be capture or
22 not capture in our regulatory space in order to be honorable
23 under the MOU is the issue.

24 So it wasn't -- it isn't as clear to me that it
25 conflicts with the MOU. It may be an effort by staff to

1 carry out de facto what has been going on under the MOU.

2 MR. FERTEL: I think that we would appreciate the
3 fact, to some degree, NRC's in-field folks are eyes and ears
4 for OSHA and that is why the training is going on, and that
5 probably makes good sense in this cooperation and avoidance
6 of duplication of effort by federal agencies. That's good.

7 I think the concern that we have is the way both
8 the rule is written, in this case, as well as the SRP
9 information. It appears that NRC is going to regulate and
10 enforce pure chemical hazard requirements. Not chemical
11 hazards that relate to nuclear materials. We understand
12 that that --

13 CHAIRMAN JACKSON: Dr. Paperiello is shaking his
14 head no.

15 MR. FERTEL: I hope he is shaking it that -- he is
16 shaking no, that they don't intend to do that. I would love
17 to be corrected on this.

18 [Laughter.]

19 MR. FERTEL: I can't see Carl.

20 COMMISSIONER DIAZ: But let me understand, in the
21 relative worth of each item, how big is this issue compared
22 to the ones we have been talking about? I mean is the
23 inspection and reporting of chemical hazards as important to
24 you as what you have been talking about? Or is it a
25 relatively small issue compared to the rest?

1 CHAIRMAN JACKSON: Do you want us to fix this, but
2 have the ISA in the license?

3 [Laughter.]

4 MR. FERTEL: Can I get a few more choices?

5 [Laughter.]

6 MR. FERTEL: I want to know all the options before
7 I choose. I think, Commissioner Diaz, let me try and answer
8 this maybe a little bit differently than you posed the
9 question. I think this is almost a no-brainer for the
10 Commission. Because it is outside of the purview, and I
11 would assume that Karen would offer whatever legal opinion
12 she would have on it. But I think that pure chemical hazard
13 is truly outside the purview of the NRC's regulatory
14 requirements, so it ought to be an easy one, not requiring
15 trade-off with some of the others.

16 And, again, if Carl was shaking his head no, I
17 would love to stand corrected on this and have him say that
18 was not the intent.

19 CHAIRMAN JACKSON: Not wanting to cut you off, but
20 we have used most of the time, and we will have the panel to
21 hear from.

22 DR. BAER: I have got a third of page, and then
23 back to Marv for about a page.

24 Finally, I would like to point out that the
25 proposed rulemaking package contains a number of new

1 concepts that were not part of previous discussions and not
2 part of the staff's proposed disposition of our rulemaking
3 condition as approved by the Commission. These concepts
4 include, among others, the introduction of design criteria
5 for new Part 70 facilities or for new processes at existing
6 facilities. It requires new reporting requirements and a
7 new provision for the conduct of preliminary ISAs prior to
8 construction of new facilities or processes. These new
9 concepts, among others, warrant careful review before they
10 are included in a proposed rule.

11 Now, I will turn the floor back over to Mr.
12 Fertel.

13 MR. FERTEL: The facility operations committee and
14 the facility operators would like to move forward with a
15 rulemaking that would aid in further enhancing both the Part
16 70 regulatory process and in assurance of adequate public
17 health and safety at the facilities.

18 SECY 98-185, however, with all of its
19 complexities, does not provide the basis for doing so, nor
20 does it meet all of the guidance in your 1997 SRM. NEI
21 requests that the NRC reconsider our petition and adopt a
22 rule that requires licensees to conduct ISAs using accepted
23 techniques, where I think we do have agreement; requires
24 licensees to document the results of those ISAs and to make
25 those results available for NRC review and inspection; and

1 directs licensees to identify and correct vulnerabilities
2 identified through the ISA process; and ensures that
3 controls established those vulnerabilities are maintained.

4 We continue to believe that this simple approach,
5 coupled with an immediately effective backfit provision, and
6 we will have more discussions with Commissioner McGaffigan,
7 would provide a sound a cost effective basis for further
8 enhancing safety at licensed Part 70 facilities. And the
9 SRP should not be adopted in its present form, nor used on
10 an ad hoc licensing and inspection basis in the interim.

11 We recognize that the staff proposal does comport
12 with some of the guidance provided by the Commission in the
13 1997 SRM. In this regard, we ask that the Commission
14 consider issuing new guidance to the staff that reiterates
15 your direction regarding the elimination of new prescriptive
16 programmatic requirements, that addresses the regulation of
17 pure chemical hazards, and that you reconsider your position
18 on the ISA and the license, and the timing and
19 implementation of the backfit provision.

20 We, again, appreciate the opportunity to appear
21 before you today. We remain committed to working with the
22 staff and the Commission towards resolution of the issues we
23 have raised and we would be pleased to answer any other
24 questions you have.

25 CHAIRMAN JACKSON: Well, you know, Commissioner

1 McGaffigan has advertised his position on the backfit issue.
2 I am going to advertise something to you, and this has to do
3 with this issue of documenting or docketing of the ISA and
4 what results are available for NRC review and inspection. I
5 do not believe it is acceptable to try to fix one problem,
6 and this is separate than -- I mean, because I think the
7 issue can be addressed separately or, you know, we can deal
8 with the issue whether the ISAs, the full ISAs need to be a
9 license. But it is not that you solve it by saying, well,
10 we have it hear, and if you want it, come and get it, kind
11 of thing. And so I think you need to think through whether
12 there is some middle ground with respect to this issue of
13 how much information and where it is. Because, again, we
14 don't need to have it be overly onerous for you, but, at the
15 same time, the agency has to be able to have what it needs
16 to have for its decision making. And so I am just saying
17 that is my point of view. Yes.

18 COMMISSIONER MCGAFFIGAN: I would like to ask a
19 question about this preliminary ISA concept. As I
20 understand it, and, obviously, I have only heard about it in
21 the last few weeks myself, this is partly motivated by the
22 potential for some DOE facilities to come under our purview,
23 the tank waste remediation project up at Hanford, the MOX
24 facility if it comes under our regulatory purview, et
25 cetera.

1 And, indeed, I know in the text of something I
2 have seen, I think a White Paper, you all say that this is
3 not a problem for your facilities. But there is some
4 historical evidence that is a problem for DOE. There's a
5 famous Rocky Flats plant that closed before opening because
6 it was misdesigned from a criticality perspective.

7 So how -- you know, the problem we have is that
8 Part 70 may be a document that will be used, if it is
9 revised, for both the existing well-established facilities
10 that you all represent and how a framework for dealing with
11 these complex DOE facilities, where some of these
12 criticality issues are going to be much for difficult. And
13 so the preliminary ISA, you know, may force them to think
14 through in DOE space, and their contractors, some issues
15 where there is, as I say, there's at least some historical
16 evidence that DOE didn't do well. How do you respond to
17 that?

18 MR. FERTEL: Well, again, I think in the
19 regulatory space that you are looking at, Commissioner, what
20 you ought to do is maybe separate the two. For one thing,
21 these licensees have been licensed by NRC for 30 years now
22 probably. And while they didn't have an ISA for all that
23 time, you know, they were licensed. They have all gone
24 through license renewal, one is completing it now, and NRC
25 found fit to find them safe to keep operating.

1 The ISA, by its nature, is living document. I am
2 not quite sure I even know what a preliminary ISA is, to be
3 completely honest with you, given the living nature of the
4 document. So you would do the best job you can with the
5 best information available, and you would continue to use
6 that document, both at the plants and in regulatory space.

7 If there's unique aspects of the DOE situation, I
8 guess my encouragement would be write a separate section,
9 even if it is under Part 70, that allows you to make that
10 distinction and impose different sets of steps in the
11 process maybe for DOE facilities coming in. But maybe you
12 can't mix it all together in the same bowl, you know, right
13 now.

14 MR. ALLEN: I think just to add quickly to this,
15 and it is scary to me because I have seen, within our own
16 facility, the escalation of administering these
17 requirements. But in one of our discussions over the last
18 several days, I heard a number where a process change in a
19 facility was proposed to have several thousand pages of
20 documentation and approximately six man-years' worth of work
21 to be required for that process change, and it now almost
22 four-fold the number of people and ten times the amount of
23 documentation. And that is scary for a process change.

24 So I think what we are really suggesting is that
25 we need to work together through this so that we don't

1 create a Rocky Flats similar situation, but we recognize
2 that the ongoing nature of our facilities, which have been
3 licensed for 30 years, really needs to be taken into
4 account. So I would just echo what Marvin has said and
5 recognize that we want to work through this together.

6 MR. VAUGHAN: Yeah, a couple of more points on
7 that, if I can. One thing is we have been licensed for 30
8 years, but up until recently we had to redemonstrate safety
9 at every five year renewal. Now, I know the five years got
10 a little longer, but at a relatively frequent periodic
11 cycle, we had to completely redemonstrate safety for our
12 facilities.

13 The other thing is our facilities have to operate
14 and operate efficiently and cost effectively, and so,
15 therefore, when we consider modifications or changes to the
16 facility, we have to be satisfied that we are protecting the
17 stockholders and that the mission we are on is one that will
18 proceed successfully. So there are some differences between
19 our segment and DOE, for example.

20 CHAIRMAN JACKSON: Well, let me make one comment,
21 which actually may sound like it agrees with Commissioner
22 McGaffigan.

23 [Laughter.]

24 CHAIRMAN JACKSON: But let me assure you it is
25 purely coincidental. You know, I appreciate what you are

1 saying about the fact that your facilities have operated 30
2 years. And that, you know, what we put into place ought to
3 make sense relative to the safety of those facilities.

4 At the same time, at any given time, the
5 Commission has a responsibility to decide what the baseline
6 needs to be. And so it is not a linear no-threshold model
7 that everything goes to zero. You know, there will be some
8 baseline. It has to be risk-informed, et cetera. So that's
9 number one.

10 Secondly, and this is where I touch base with what
11 Commissioner McGaffigan talked about within the context of
12 DOE, but let's leave DOE aside. I mean at the moment you
13 have your 30 year old facilities. The real question
14 becomes, you know, one could say, will there never be
15 another fuel facility created or licensed? And what then,
16 in terms of kind of a regulatory framework should exist that
17 allows us to deal effectively and fairly with you, but that
18 doesn't necessary require us to go down a new rulemaking
19 path each time there is potentially a new facility being
20 potentially licensed? And so I think that is the kind of
21 the issue, to me, at the heart of it.

22 And whether -- and I appreciate what you say, that
23 perhaps for DOE, if we go down that path, there may be a
24 need to have some segregation of some of the kinds of
25 requirements. But there always is this embedded issue of

1 what kinds of regulatory fabric can be the living regulatory
2 fabric that allows us to accommodate existing facilities,
3 but that doesn't always make us have to create a new rule if
4 there is a new facility. But I understand the point you are
5 making.

6 Commissioner Diaz.

7 COMMISSIONER DIAZ: Just a comment. This is not
8 advertising, there might be another exception.

9 I am concerned about the fundamentals of what we
10 are talking, and let me see if I understand it. There seems
11 to be agreement on the ISA. Everybody seems to like the
12 ISA. And if that is true, I think the bottom line is make
13 this living ISA a functional document that allows you to
14 manage your plant according to the safety requirements that
15 the Commission imposes. That means some communications,
16 some ability for us to determine that you are carrying out
17 your configuration management with adequate intrusion but
18 not maximum intrusion. And the problem is how we do that.

19 And I think one of the issues that has been raised
20 is how much you put as part of the license or not. And I
21 think that is what we need to get, you know, real clear
22 feedback from you and from the staff, because I think that
23 is the bottom line.

24 CHAIRMAN JACKSON: Thank you very much.

25 MR. FERTEL: Thank you very much.

1 CHAIRMAN JACKSON: We will now hear from the NRC
2 staff. Mr. Callan, why don't you begin?

3 MR. CALLAN: Good morning, Chairman,
4 Commissioners. With me at the table this morning are
5 Elizabeth Ten Eyck, who is the Director of the Division of
6 Fuel Cycle Safety and Safeguards; Carl Paperiello, who is
7 the Director of NMSS; and Richard Milstein, the Project
8 Manager for the Part 70 effort.

9 Elizabeth Ten Eyck will be our primary briefer,
10 but before I turn the discussion over to her, I would like
11 to have Carl Paperiello make a few opening comments.

12 DR. PAPERIELLO: I want to -- I would like to just
13 talk about the process, and Liz will talk about the rule.

14 The staff is extremely sensitive to the release of
15 pre-decisional information without explicit Commission
16 direction. So in all our interactions with the industry on
17 the rule, we never gave them text. We came -- we talked
18 about everything and what was in it, but they were never
19 given text. And a lot of the discussions were on the rule
20 and very little on the --

21 COMMISSIONER McGAFFIGAN: Can I --

22 CHAIRMAN JACKSON: Let him finish his sentence.
23 Let's go.

24 DR. PAPERIELLO: It was not on the standard review
25 plan. And I want to step back. Standard review plans,

1 traditionally, have been not constraints on licensees but
2 constraints on individual reviewers to ensure uniformity of
3 the process. Because we do that, prescriptiveness creeps
4 in, because we are putting the constraints on what the
5 reviewer is allowed to accept to ensure that reviews done by
6 different reviewers achieve the same result.

7 It was clear to me when I took over NMSS, where we
8 had very poor standard review plans, that we had to update
9 them, and also they were de facto constraints on the
10 applicants. So I made the decision that in the future all
11 NMSS standard review plans would be issued in draft and we
12 would get public comment on them.

13 Now, for those standard review plans for which
14 there is not an associated rulemaking, they are old rules
15 and things like that, that is an ongoing process. We have
16 been revising all of these things and getting public input.
17 When we had a standard review plan provided as part of the
18 rulemaking, it still is pre-decisional, and without explicit
19 Commission direction, we have never put these out in the
20 public domain for comment, and that is where we stand right
21 now.

22 We changed in Part 35, based on the proposal we
23 made to the Commission, everything was done on the web. In
24 the future, since NMSS is now responsible for all its
25 rulemakings, we will probably always propose to you, that is

1 the way we do, but the situation we have right now, this is
2 the first time this standard review plan went out for, you
3 know, for the review. I guess there's -- well, I am
4 bothered by the bit of an implication that there was bad
5 faith on the part of the staff, and we didn't try to do
6 that.

7 CHAIRMAN JACKSON: Let him finish that paragraph,
8 then it's all yours.

9 COMMISSIONER MCGAFFIGAN: I am not --

10 CHAIRMAN JACKSON: Are you done?

11 DR. PAPERIELLO: Yes.

12 COMMISSIONER MCGAFFIGAN: -- accusing bad faith.
13 What I believe is, though, that we would be better served.
14 I mean I have actually been citing, as Joe Callan knows, to
15 Joe, why can't we -- why can't NRR be more like NMSS in the
16 way we did Part 35, the way the decommissioning guidance was
17 out on the web, even as we were voting on it and giving you
18 final guidance on how to deal with the decommissioning
19 guidance for the decommissioning rule.

20 And I think that that is a better process. I
21 think it leads to better results. And so if your intention
22 in the future is to use that process, that is fine. I
23 didn't imply -- these gaps occur all the time around here.
24 It happens in reactor space all the time, where we go
25 pre-decisional and we can't talk about it until it is before

1 the Commission, and we end up having train wrecks. And we
2 would be better off having the documents -- we are not, to
3 my knowledge, we are not having any train wrecks in Part 35
4 partly because we have --

5 CHAIRMAN JACKSON: Right. But I think you are
6 both right. Okay. But I think we ought not to spend our
7 time talking about what did or didn't happen. I do not
8 believe the staff operated in bad faith. You realize that
9 the staff has traditions in terms of how it operates that
10 are based on previous Commissions and how they wanted to do
11 things. If this Commission wants to do things differently,
12 then it has the prerogative to do that and to give the staff
13 that guidance. And so, you know, I think you have a
14 situation where the Commission made a deliberate decision,
15 together with the staff, on Part 35.

16 Perhaps it should have thought more broadly at
17 that time on other rulemakings. It did not. We are where
18 we are. It is out for public comment, and that is the
19 opportunity to make changes as appropriate, and I think that
20 is where we ought to take it up and not spend more time
21 talking about the process, you know, other than how we might
22 change in on a go forward basis, and talk about the content
23 of the rule. Okay.

24 MS. EYCK: Thank you. Good morning. We would
25 like to discuss our Part 70 activities included on the

1 viewgraph and overview. Since members of the Commission
2 have changed since we first started this effort, we would
3 like to provide a small background of how we got to where we
4 are today. We will identify some of the weaknesses in the
5 current Part 70. We will discuss the approach that we have
6 taken in developing this rulemaking package. And we will
7 describe the major elements that are contained in the
8 proposed Part 70.

9 Next slide, please. I'm sorry, we can -- yes,
10 next slide.

11 For background, in 1986, a worker was killed at
12 Part 40 license facility based on a chemical hazard,
13 hydrogen fluoride, that resulted from the result of UF6.
14 And in 1991, we had a near criticality accident at a
15 licensed -- a Part 70 licensed facility. And after that,
16 staff and other activities and other organizations started
17 to reexamine the fuel cycle safety program to identify
18 weaknesses with the program.

19 A review by the House Committee on Government
20 Operations criticized NRC for being a paper tiger, too
21 narrowly focused on radiological hazards and not enough on
22 non-radiological hazards such as chemical and fire. And
23 quoting from their report, they made a comment that said,
24 "The Committee must conclude that deficiencies in NRC's
25 regulatory program for the licensing and inspection of fuel

1 facilities were also a major contributing factor to the
2 accident." This is the death of the individual at Sequoia
3 Fuels.

4 "In fact, NRC acknowledges a number of
5 shortcomings in its regulatory program with respect to
6 chemical and other toxic hazards at fuel cycle facilities in
7 its own lessons learned report."

8 It also stated that, "It is the view of the
9 Committee that NRC must assume regulatory authority over
10 chemical hazards when they cannot be separated from or could
11 potentially affect licensed radioactive material."

12 So it was just not the staff that was finding
13 fault with our regulatory program, there were outside
14 entities that also were.

15 COMMISSIONER McGAFFIGAN: Having come out of the
16 Congress, one of the great things Congress sometimes does is
17 give you report language and no authority, and it can lead
18 you astray. This issue that Mr. Fertel brought up, he
19 believes that the rule that is proposed to us in the
20 chemical area goes beyond our regulatory authority in that
21 it doesn't just deal with those cases where it affects us,
22 but deals with things that are properly in the purview of
23 EPA or OSHA, or their state counterparts. How do you
24 respond to that?

25 MS. EYCK: Well, I am prepared to discuss that in

1 greater detail when we talk about the specific elements of
2 the rule. But we have, basically, followed the OSHA MOU as
3 far as focusing on what our responsibilities are. We have
4 expanded to also address potential impact on the public,
5 besides just the worker, and that is a little bit of an
6 expansion, but we feel that, from our responsibilities from
7 protecting the worker and the environment around, that this
8 was appropriate. But we can discuss that in a little bit
9 more detail when we get there, if you would like.

10 At that time -- and NRC formed a task force to
11 also evaluate its regulatory program and their findings were
12 documented in NUREG-1324, proposed method for regulating
13 major fuel facilities. At that time the staff also
14 initiated a team assessment program to look for weaknesses
15 in the implemented programs at licensed facilities.

16 However, in November of 1992, the Commission
17 directed the staff to upgrade the regulatory base for
18 assuring the adequacy of licensee performance rather than
19 trying to depend upon inspections to inspect safety into the
20 licensed facility programs.

21 After a reorganization in 1993 that combined fuel
22 cycle safety and safeguards programs, and Commission
23 approval of an action plan to improve the fuel cycle
24 regulatory program, staff started to rewrite -- or,
25 initially, to revise the regulatory base, and then later,

1 after Commission approval, to rewrite the regulatory base,
2 because of the conditions of Part 70 and the weaknesses.

3 COMMISSIONER McGAFFIGAN: NUREG-1324 has been
4 referred to by NEI, and they quote senior Commission
5 officials at the time, as it is a "blue sky" document. What
6 would the ideal be if it weren't constrained by anything?
7 But they said it is not a road map for going forward. And I
8 don't know whether Commissions ever took a point of view on
9 1324 in a SRM or whatever, but the plain words in 1324, as
10 described by the author, seemed to imply that he or she did
11 it without a lot of constraints.

12 MS. EYCK: It was a staff effort to review the
13 regulatory program, and they did include a lot of
14 recommendations on how to improve it. Our proposed
15 rulemaking does not endorse all of the proposals that were
16 in NUREG-24. We are just showing that there was a staff
17 effort at the time to identify where there were areas that
18 needed improvement. Upgrading the regulatory base was one.
19 Having some type of a hazards analysis to have a basis for
20 risk was another one. So there were a number of areas --
21 addressing chemical hazards was another one. So what the
22 staff basically did was look the evaluations of the programs
23 by all the different entities and just came up with
24 recommendations on ways to improve it. But this rulemaking
25 is not a mapping of all of the recommendations that were

1 contained in that document. It is only a recognition that
2 it was recognized by both NRC and outside entities that
3 improvements were necessary in the fuel cycle safety
4 program.

5 Basically, we were asked by the Commission to
6 upgrade the regulatory base and we started that effort.
7 Industry was initially opposed to any changes in the
8 regulatory base, and staff then conducted a number of public
9 meetings to try to discuss our proposed approach with them
10 and to explain what we were looking for in both the rule and
11 the standard review plan.

12 In a Commission meeting in 1996, industry, while
13 not endorsing the staff's proposed approach in Part 70, did
14 support the conduct of an ISA, as they had mentioned earlier
15 here. The Commission at that meeting also encouraged the
16 industry that if they did not support the staff's proposed
17 approach, that they would propose their own program. And in
18 September 1996, as was mentioned earlier, the Nuclear Energy
19 Institute, on behalf of the fuel cycle industry, did submit
20 a petition for rulemaking.

21 In SECY 97-137, the staff proposed a resolution to
22 that petition. Staff agreed in principle, since it did
23 include the conduct of an ISA with the industry approach,
24 but they did not agree in total and suggested some proposed
25 modifications.

1 In August of 1997, the Commission approved the
2 staff's proposed approach and directed the staff to proceed
3 with rulemaking, and you now have that rulemaking before
4 you.

5 Next viewgraph, please. The current Part 70 has a
6 number of weaknesses, and among the more significant if the
7 fact that it is not based on a specific risk-informed
8 approach. Protection against an inadvertent criticality is
9 not specifically required. The primary --

10 COMMISSIONER MCGAFFIGAN: Could I stop you on that
11 point? Because, again, you and NEI just are on -- they say
12 that 70.22(a)(8), and I have looked at it, specifically
13 requires procedures to, quote, "avoid accidental
14 criticality." I mean what -- so if we have a rule that says
15 you are to, quote, "avoid accidental criticality," why isn't
16 that protection against inadvertent or accidental
17 criticality?

18 MS. EYCK: Well, we feel that the procedures to
19 avoid it is not as strong a basis as for them to evaluate
20 the risk from all of the areas of criticality and implement
21 procedures to protect against it. And that is what we are
22 looking at, is a risk-informed approach that does protect,
23 or does specifically say that they must protect against
24 criticality.

25 Where it is included is in just a little -- in the

1 content of an application that just says that it should
2 address procedures, that criticality should be avoided. We
3 feel that that is an insignificant reference to a safety
4 issue that is as important as nuclear criticality.

5 Okay. An analysis to identify the hazards such --
6 of an ISA and the identification of items relied on for
7 safety is not required.

8 The current two part license format only requires
9 in Part 2, at the time of a license submittal or a renewal,
10 that the operator discuss their safety program. There is no
11 commitment to notify NRC of any changes they would to that
12 program. And over time, the safety basis, or the safety
13 discussion is not representative of the total of the
14 licensee's programs. Just as was mentioned earlier, that
15 they -- when they go through license renewal, they have to
16 come back and totally rejustify, or discuss their safety
17 basis. That is because that it has eroded over time and
18 there is no requirement for them to keep NRC up to date on
19 that. That is why we are proposing that NRC would have that
20 type of a program where we would have a current safety
21 basis.

22 And we also found in the rule --

23 COMMISSIONER DIAZ: Excuse me. In Part 70 there
24 is also kind of a weakness in that when you get to time, you
25 know, timely renewal.

1 MS. EYCK: Timely renewal. Yes, that is an issue.
2 We didn't raise that here, but that is an issue. And the
3 fact that there is no time restraints on the licensee on
4 when they -- except that they have to submit their renewal
5 before the license expires. There is then no timeliness on
6 when all that action has to be completed. So we end up with
7 no sense of urgency on, when we ask them for additional
8 information, to answer questions that were not addressed in
9 their application, for them to respond with anything. So
10 that is a problem. But I think we have got a solution to
11 that in the fact that if we do incorporate the ISA as a
12 safety basis, we have a living license. And so when it
13 comes to license renewal, it is almost a pro forma activity,
14 because we already have in-house their current safety basis.
15 So I think that we have come up with a solution to that, but
16 it is a problem with our current program.

17 COMMISSIONER DIAZ: But if there is a significant
18 safety issue, let's just assume, in the in between, what
19 process do we have to address it so it won't linger on?

20 MS. EYCK: I was going to plan to address that in
21 more detail later on --

22 COMMISSIONER DIAZ: No, no. Okay.

23 MS. EYCK: -- the specific elements. If we could
24 wait until just then.

25 COMMISSIONER DIAZ: Fine. Sure.

1 MS. EYCK: Okay. And also activities such as QA
2 and maintenance are not required. Now, the industry has
3 addressed the SRP and they say that it includes a number of
4 these programs. It was never our intention to require all
5 of those programs to be applied across the board. The SRP
6 basically says that in items that are relied on for safety,
7 you have to ensure measures to make sure that they are
8 available and reliable. And if one of those measures
9 happens to be something like maintenance, then the reviewer
10 would go to the section that includes criteria for
11 maintenance and what would be an acceptable maintenance
12 program. Is it a preventive maintenance program? What
13 should they look for?

14 So there is no intent for all of the programs to
15 be in the ISA. The ISA is a guidance document. It doesn't
16 provide -- it doesn't issue requirements or anything. All
17 it does is when the licensee proposes such a program, this
18 is a section that allows them to go and look based on
19 existing guidance or, you know, basic -- what can I say, you
20 were talking about earlier, --

21 DR. PAPERIELLO: Consensus standards.

22 MS. EYCK: Consensus standards to what would be
23 viewed as an acceptable program. We can get in more in
24 this. I didn't want to get off --

25 COMMISSIONER DIAZ: I was going to say, if the ISA

1 is a guidance document, what should be a part of the
2 license?

3 MS. EYCK: The SRP is a guidance document. I'm
4 sorry.

5 COMMISSIONER DIAZ: Oh, I'm sorry.

6 MS. EYCK: If I said ISA --

7 COMMISSIONER DIAZ: You said ISA. Okay.

8 COMMISSIONER MCGAFFIGAN: Let me just take the one
9 example that they talked about in their testimony. If you
10 are a license examiner and the QA program is required, the
11 SRP says that ANSI -- this consensus standard, ANSI QA
12 standard is an acceptable way to meet the rule, they said
13 that they don't believe that that is necessarily going to be
14 required for even the high risk items identified in the ISA.

15 If a reviewer comes -- you know, is reviewing an
16 application and comes across this and they don't want to use
17 ANSI QA and they justify using a lower standard, how much
18 are we going to grind on whether that different standard is
19 acceptable?

20 MS. EYCK: Well, the SRP is just one way of
21 meeting our requirements. They can -- they are more than
22 welcome to justify other ways of doing it. And the guidance
23 document doesn't say that they have to have a QA-1 program.
24 I think it says something like that they may refer to in
25 QA-1.

1 What is in the SRP would be for a high risk
2 criteria. If it is a lower risk, based on their ISA, then
3 lower requirements would be acceptable in meeting the QA.
4 You know, we are just looking at it. We are trying to give
5 the reviewer some guidance. We are trying to standardize,
6 as Carl has mentioned earlier, the licensing review process,
7 and this document is just guidance as far as what way
8 --things that would be acceptable.

9 COMMISSIONER McGAFFIGAN: But if I am reading it,
10 and from industry, I know from reading the document that if
11 I come up with this ANSI QA, it is going to be a no-brainer
12 for the staff, they will go on to the next page. If I am
13 trying to justify something else, it is going to take some
14 time and I am going to have to provide some degree of detail
15 to justify it, and he or she is going to ask a bunch of
16 questions on it. And so, de facto, I think what they are
17 worried about is if you say this -- if it is the only way
18 mentioned for a high risk item, --

19 MS. EYCK: No.

20 COMMISSIONER McGAFFIGAN: It is not. Okay.

21 MR. CALLAN: Commissioner, you point is correct,
22 that the SRP in both reactor space and Part 70 space does
23 provide, if you will, the path of least resistance for a
24 licensee, and to deviate from it does usually involve more
25 resources and time. And it does -- we know our processes do

1 ensure that the SRP provides a de facto set of expectations
2 as well. And so I think that needs to be said.

3 MS. EYCK: And it is. Okay. In resolving these
4 NEI petition, the staff recommended that the Commission
5 endorse an approach that the proposed risk-informed
6 rulemaking be based on the performance of an ISA, which is a
7 type of a hazard analysis similar to that developed and used
8 by the chemical industry.

9 The conduct of an ISA and the identification in
10 the license application of items relied on for safety and
11 measures to ensure their continuous availability and
12 reliability is deemed by the staff to be the foundation of
13 the proposed risk-informed approach.

14 Licensees will be provided to make changes based
15 on the results of the ISA on their safety program without
16 NRC prior approval. The process would be that they could
17 make those changes if they have already addressed it in the
18 ISA and it doesn't introduce any additional problems, and
19 then periodically, maybe every six months or every -- send
20 NRC a change page to their summary submittal of the ISA so
21 that NRC would have a current copy of their summary of their
22 ISA.

23 It is only changes that would be new processes or
24 major changes that would require an amendment to come and
25 actually change the license.

1 COMMISSIONER MCGAFFIGAN: I am sorry to keep
2 asking, but that, the 50.59 criterion you have in the rule,
3 I am not sure it is only major changes. It is more than
4 minimum changes, right? It is changes, and there's a big --
5 you know, in my dictionary there is a big gap between
6 minimum and major or significant, and if it is only the
7 significant -- they are saying, one of the people who
8 talked, that at his plant there's 800 changes a year, and
9 zero to 2 or so come before you at the moment under the
10 license conditions that that plant operates under. And the
11 fear is that that under this new rule, with the 50.59
12 provision, and the word minimal in it, that a far larger
13 percentage of those 800 will come to us, which will consume
14 his resources, and consume resources that perhaps you don't
15 have to then provide approval for the changes. So how do
16 you respond to that?

17 MS. EYCK: Well, first off, only the changes that
18 we will be interested in are ones that introduce new high or
19 intermediate risks. The graded approaches, we will be
20 focusing only on the higher risk items. They can make all
21 kinds of changes to their process if, through their ISA, it
22 doesn't introduce any of these types of risks, which I will
23 describe in a little bit more detail in a minute. So it
24 isn't all these 800 changes.

25 First off, if the change doesn't -- is covered by

1 the ISA, then they don't have to submit to us. You know,
2 they can make that change and then just submit us a summary
3 change page. If it does introduce some change that they
4 have to change their ISA, that is when they would have to
5 come forth and we would review the change and the impact on
6 their licensing program.

7 CHAIRMAN GLEIMAN: Mr. Milstein, do you want say
8 something?

9 MR. MILSTEIN: No, I was just nodding in
10 agreement.

11 CHAIRMAN JACKSON: Okay.

12 COMMISSIONER MCGAFFIGAN: What number do you
13 expect to receive of changes that would be determined to be
14 above this, you know, the equivalent of an unreviewed safety
15 question threshold and, therefore, would require a change in
16 the ISA which is now, you know, the rule in the basis of the
17 plant and then how long do you -- how many resources do you
18 require to process all of those license amendments?

19 MS. EYCK: First off, I don't think I am the
20 person to ask what changes they would make in their process
21 that would increase the risk. I think that the industry
22 would be in a much better position to characterize the
23 various types of changes they make and how these 800
24 changes, how significant they are.

25 But I would say that we don't have a whole lot of

1 resources in the fuel cycle program, as you understand. So
2 I would expect the very minimal types of changes would come
3 to us to have that type of review. But there are some
4 changes like when they significantly change their process
5 from a wet to a dry, that we would expect to see an
6 amendment.

7 There's processes where they are doing new type of
8 work, which the licensees are doing now. And we would
9 expect if it a new type of a process that isn't covered by
10 their ISA, that they would come to us for a review.

11 COMMISSIONER McGAFFIGAN: It strikes me that you
12 may be in violent agreement on what the goal is, in terms of
13 the number of items that you want to be reviewing, and that
14 may already be captured by the license conditions that are
15 in the existing licenses. But there is real fear that the
16 words will -- that are in the rule at the current time may
17 not get the result that you just described.

18 CHAIRMAN JACKSON: Mr. Milstein.

19 MR. MILSTEIN: Again, later on you will see the
20 categorization of risk that we are talking about. But many
21 of these risks, many of these changes I think will fall
22 below that threshold. And they won't even come to the
23 threshold of actually having to be considered as affecting
24 the ISA. So I don't -- I really don't know the answer to
25 the question, but I suspect that it may not be -- many of

1 them may fall below that threshold and won't even have to be
2 considered at all.

3 CHAIRMAN JACKSON: Go ahead.

4 MS. EYCK: Also, a graded risk-informed approach
5 for reporting of events will also be established and
6 requiring particularly the reporting of loss or degradation
7 of items relied on for safety. A qualitative backfit
8 mechanism to enhance regulatory stability would also be
9 considered by the Commission after licensees have conducted
10 and implemented an ISA and have provided NRC with the
11 details of that safety basis to use as a baseline for
12 determining incremental risk in a backfit analysis.

13 In the case of Part 76 that was mentioned and the
14 industry, and the millions of dollars that have had to be
15 spent on modifying systems, the initial premise was that the
16 DOE orders and rules were comparable to the NRC
17 requirements. And when the backfit provision was
18 implemented, it was with the understanding that we would
19 receive an acceptable safety basis because they had been
20 operating for this long period of time. But, in reality,
21 what happened, we got a safety basis that had a lot of
22 weaknesses. And the corrections that were made in the
23 systems that were upgraded were to come up to DOE
24 requirements, not that they were required for NRC
25 requirements.

1 It's also important to note that in the areas
2 where they didn't have an appropriate safety basis, we had a
3 compliance plan, and they were required to do certain things
4 in that compliance plan to bring their safety basis up to an
5 acceptable level. Those are the things that they did that
6 were not under backfit. Because backfit assumed an adequate
7 safety basis, and they did not have it at the GDPs. And
8 that was why changes were required, not because the staff
9 was not implementing the backfit provisions.

10 Next slide, please. This viewgraph contains a
11 list of items that are really the major elements that we
12 have included in Part 70 that I would like to discuss in
13 greater detail now.

14 Next slide, please. An important element in the
15 proposed rulemaking package was the identification of
16 specific consequences against which licensees must provide
17 adequate protection. The consequence criteria are not new,
18 but are based on existing radiological and chemical
19 standards developed previously by NRC, other government
20 agencies and professional societies.

21 The consequences which are applicable to both
22 workers and members of the public are categories according
23 to their level and severity of consequences in two
24 categories, high and intermediate. Because accidents at
25 fuel facilities could result in human exposure to both

1 radiological and chemical hazards, the proposed rule adopted
2 criteria that address both types of consequences. It also
3 codifies the MOU that we established with OSHA to address
4 chemical hazards affecting workers.

5 Next slide, please.

6 COMMISSIONER MCGAFFIGAN: As you saw, the NEI
7 slide said that this conflicted with the OSHA MOU. I tried
8 to ask whether you were trying to implement the OSHA MOU. I
9 guess your answer is you are trying to implement the OSHA
10 MOU. But the --

11 MS. EYCK: If you will turn to the next slide.

12 COMMISSIONER MCGAFFIGAN: Okay.

13 MS. EYCK: If you have the next slide, we can see
14 what our consequences and how they implement the OSHA. The
15 OSHA one is primarily focused on worker protection. And we
16 adopted the standards that deal with the consequence of both
17 workers and members of the public. On the viewgraph, the
18 consequences that are identified as high include accidental
19 exposure to the worker or a member of the public to high
20 levels of radiation and hazardous chemicals. It also
21 includes, as you will see, the occurrence of a nuclear
22 criticality.

23 The consequences identified as intermediate
24 include accidental exposure of the worker and the members of
25 the public to moderate levels of radiation or chemical

1 hazards. It also includes environmental contamination.
2 Now, this is one area that -- in our original proposal to
3 you, we didn't include environmental contamination. But as
4 we looked at all of the rules, the requirements that we have
5 to meet for the Part 70 license, the NEPA requirements
6 regarding exposure on contamination were one of the things
7 that we thought was important so we included that and we
8 felt that it would fit in in the intermediate, as an
9 intermediate hazard.

10 COMMISSIONER McGAFFIGAN: Could I ask, maybe this
11 really goes to the General Counsel, who presumably signed
12 off on this paper. Is there a problem here with us trying
13 to enforce other agencies' authorities through our
14 rulemaking? I know the Congress has recently criticized us
15 the in the case of uranium mill facilities for trying to
16 enforce, at least one committee of Congress, trying to
17 enforce the in-ground aspects, that the state or EPA are
18 supposed to enforce, in our licensing and rulemaking
19 process.

20 MS. CYR: Well, I think with respect to the
21 chemical hazards, and I think you have -- in the MOU, there
22 are sort of like four categories of hazards that are
23 described there, and it says three of them are clearly ones
24 that are within our scope of what we view as within the --
25 they are, in a sense, a mixed -- the chemical hazard is, in

1 a sense, either inextricably linked with the use of the
2 material or it is associated with assurance of safe
3 utilization and use of the material.

4 For instance, like on the plant conditions, if you
5 had a chemical hazard that would somehow impact your ability
6 to get in and deal with the radiological safety of the
7 plant, that then you could look at the chemical hazard in
8 that context. But strictly chemical hazards that did not,
9 in a sense, have those attributes were not ones that we
10 would be looking at.

11 And so I think if you read the staff's framework
12 in that context, I think using chemical hazards within those
13 categories of kinds of activities, that's okay.

14 Again, under NEPA we have obligations, in a sense,
15 to look for the -- look at the impacts of the various
16 activities that we license and try to minimize those impacts
17 in terms of taking into account those impacts in the context
18 we license and look at those hazards.

19 So, I think, again, there is a basis there to look
20 at and to try to achieve, in a sense, the most
21 environmentally benign process we can in the context of
22 looking at the license and trying to look at alternative
23 ways of dealing with things in the context of licensing.
24 So, again, I think there, again, in terms of how it is tied
25 to the processes that were licenses, we have a basis to get

1 in and look at those activities.

2 But if you are looking at, again, just a
3 free-standing requirement that is not driven by a process or
4 a licensing activity that we are looking at, that that might
5 be problematic. But I think --

6 COMMISSIONER McGAFFIGAN: It strikes me that it
7 sounds like there is a gray area there and the counsels need
8 to talk to each other.

9 CHAIRMAN JACKSON: Well, the question is whether
10 there could be more clarity of language.

11 MS. EYCK: And within each category, the
12 radiological and chemical criteria for a given level of
13 severity do not necessarily represent equivalent levels of
14 health effects. However, they do represent current
15 regulatory practice.

16 Next slide, please. To achieve an acceptable
17 level and to minimize the regulatory burden, the proposed
18 rule revision requires licensees to provide a graded level
19 of protection to sufficiently reduce the likelihood of
20 accidents commensurate with their consequences. Thus, the
21 occurrence of a high consequence event should be highly
22 unlikely, and the occurrence of an intermediate consequence
23 event should be unlikely. The terms are defined in the SRP
24 with criteria for judging the likelihood of potential
25 accidents.

1 Next slide, please. The proposed rule requires
2 licensees or applicants to perform an ISA. We have defined
3 an ISA as a systematic analysis to identify plant and
4 external hazards and their potential for initiating accident
5 sequences, to identify the potential accident sequences and
6 their likelihood and consequences. And, finally, to
7 identify the items that are relied on for safety to protect
8 against the hazards that are identified.

9 Licensees must demonstrate, based on the
10 performance of an ISA, their ability to provide an adequate
11 level of protection against accidents that could occur at
12 their facilities.

13 Next slide, please. We agree with NEI that the
14 performance of an ISA to identify items relied on for safety
15 and the implementation of measures to ensure the continuous
16 availability and reliability of these measures are important
17 items towards increasing the confidence in the margin of
18 safety at these facilities.

19 However, without incorporating the summary of the
20 ISA in the license, and the identification of items relied
21 on for safety, and commitments regarding how they will
22 maintain these items available and reliable, NRC would not
23 have a safety basis for regulatory decisions that would be
24 available for public scrutiny.

25 CHAIRMAN JACKSON: So let me make sure I heard.

1 Did you say you were requiring the summary of the ISA?

2 MS. EYCK: Just a summary of the ISA, not the ISA.
3 Only a summary. And this has been contention between us and
4 industry -- I shouldn't say contention -- an item of
5 disagreement on what is the appropriate -- what is
6 appropriate to include in the summary. And we have been
7 kind of talking back and forth from each other. So I have
8 asked the staff, and it is a part of this package, to put
9 together what we would consider a summary submittal, and
10 what it would include.

11 Now, obviously, this is a guidance -- in the
12 guidance area, and it is something that we have a strawman
13 now to talk specifically about whether what industry feels
14 is an over-requirement versus something that, you know, we
15 feel is important to have. So we have something concrete to
16 talk about. You know, I agree that it may not be perfect.
17 But we are working towards trying to get a consensus of what
18 would be appropriate to include in a summary.

19 Now, the industry has indicated today that what we
20 have included was above their expectations on what they had
21 to provide. So I think we have got, you know, some area to
22 work in there. But we do think that it is important to just
23 have a summary. And here, again, this is only what they
24 would be updating, is our summary. It wouldn't be the
25 entire ISA. They could make changes to their ISA, whatever,

1 as long as it didn't affect the summary of the accidents and
2 consequences and measures and items relied on for safety.

3 CHAIRMAN JACKSON: So you are saying you have
4 started down a path to try to resolve this?

5 MS. EYCK: Well, I have started with the point
6 that we have a draft document that it gives our perspective.
7 We feel that it is a very good document, that when the rule
8 goes out for public comment, people will have something
9 there to review and to give us feedback on whether they
10 think that what we are asking for is appropriate or
11 inappropriate.

12 CHAIRMAN JACKSON: So you have included it in this
13 package?

14 MS. EYCK: It is in the rulemaking package, yes.

15 COMMISSIONER DIAZ: It might not be an easy answer
16 for this, but can we have whatever is needed from the ISA
17 that is in here, call it quote-unquote, docketed, but not
18 part of the license?

19 MS. EYCK: I think maybe that might be a better
20 question for OGC.

21 MS. CYR: I don't think you have to have that as
22 part of your license in order to be develop enforceable
23 license conditions. I think there are other ways that you
24 could get at -- it is a matter of approach -- at what seems
25 to be most straightforward or usable between the staff and

1 the licensee, in terms of how you want to go about having a
2 basis to make sure that those elements of the activities at
3 the site, that you have a way to make sure that they
4 maintain those. I mean and that is -- you may be able to do
5 that through a license condition or it may be without
6 necessarily having it as a piece --

7 COMMISSIONER DIAZ: As part of the license.

8 MS. CYR: As part of the license.

9 MS. EYCK: We have the answers to come in to our
10 response to questions. They are documented, they are not
11 necessarily a part of the license, but they might be
12 included in the safety analysis report that is written for
13 the licensing activity.

14 COMMISSIONER DIAZ: Because there is an issue here
15 whether it is part of the license or not, and there is
16 another issue is having the information that is required
17 available. And it might be that we can have whatever
18 information is available and not having it part of the
19 license.

20 CHAIRMAN JACKSON: What is -- I guess I am trying
21 to understand what the significance is, if you are talking
22 in terms of a summary, of having it as part of the license
23 versus having it docketed. What is the difference?

24 MS. EYCK: We think, from our perspective, I think
25 one of the reasons is we think that have it a part of the

1 license is a formal commitment to, particularly, on the
2 identification of items relied on for safety. We have had
3 situations where we have had events and we have gone to the
4 facility and we have said, okay, what are the items that are
5 you are relying on for safety? And they weren't initially
6 able to provide us with the details of what are those items
7 that are relied on for safety.

8 And then there's other situations where we are
9 trying to develop a risk-informed inspection program. And
10 if we knew and had a commitment to what were the items
11 relied on for safety, then we can focus our inspections on
12 those high risk areas to make sure that the measures are
13 being maintained and the controls are available and
14 reliable. So there's just more of a formal identification
15 and commitment when it is contained in the license.

16 COMMISSIONER McGAFFIGAN: It just strikes me that
17 what you just said could be achieved through the alternative
18 of having a commitment to having a living ISA but without
19 having it in the license. You will then -- they will have.
20 If they don't have it, like they said, you enforce them for
21 not having it. And if they --

22 CHAIRMAN JACKSON: I think, though, there is a
23 question of what the NRC needs to have in its hands.

24 MS. EYCK: Yeah, it is a question also -- I'm
25 sorry -- of the documentation of what is the basis of our

1 determination of the license -- in the license that we say
2 that they are safe to operate. And that, by incorporating
3 it in the license is their documented safety basis.

4 CHAIRMAN JACKSON: What about -- is there a way to
5 do it as a docketed -- see, I guess that is a legal issue
6 for me.

7 MS. CYR: I mean again, NMSS staff has
8 traditionally written licenses where they incorporate by
9 reference large segments of the applications as part of the
10 license conditions or the license impositions.

11 NRR doesn't do it that way. I mean they write up
12 SERs, which in a sense is their safety basis for the
13 decision. And then you have a license which consists of
14 technical specifications and a set of very specific license
15 conditions, which take these, for instance, these items that
16 you are relying on for safety and you impose those as tech
17 specs or something that you have to maintain with respect to
18 the license. I mean it has been a difference of an
19 approach. So it is certainly possible to document the basis
20 for your decision and sort of what you have relied and what
21 -- to determining that there is an adequate protection of
22 safety here, without necessarily incorporating all that
23 information into the license itself.

24 CHAIRMAN JACKSON: You were going to say
25 something?

1 COMMISSIONER DIAZ: And I will bring Part 65 back.
2 I mean we had a lot of requirements under Part 65, and they
3 do all of this configuration management and process
4 controls, you know, and all of these things. But they are
5 actually, you know, not part of, quote, of the licensing
6 document. They do all of the activities, but they remain
7 part of the licensing activities.

8 We have the right of inspecting them, but they
9 remain.

10 CHAIRMAN JACKSON: Can you, if you go to your
11 slide 11, can you -- this is the one you are on, I think.

12 MS. EYCK: Right.

13 CHAIRMAN JACKSON: Can you have all of these
14 requirements in the rule? Have the information that you
15 need documented and docketed in some other way, but still be
16 able to get at these three elements without having them in?

17 MR. CALLAN: Chairman, I think that the -- whether
18 or not we have the information available is separate from
19 the question of whether it is in the license.

20 CHAIRMAN JACKSON: What form it is in.

21 MR. CALLAN: Yes.

22 CHAIRMAN JACKSON: That's right.

23 MR. CALLAN: We can definitely have it docketed
24 without having it in the license.

25 CHAIRMAN JACKSON: Right. Okay. Go ahead, Carl.

1 DR. PAPERIELLO: I don't think we are all that far
2 from the industry on this issue. I mean I think this is one
3 of these things that, within a relatively short time, we can
4 work out something.

5 CHAIRMAN JACKSON: Well, it sounds to me like what
6 may have happened goes back to what we talked about earlier
7 in terms of to what extent you felt you were free to share
8 everything. But you need to kind of get this one worked out
9 and so it strikes me that, you know, there is a success path
10 that ought to be possible, but it ought -- you know, without
11 losing these essential elements.

12 MR. CALLAN: Chairman, there is one point I think
13 Marv made regarding this issue that I'll try to paraphrase.
14 And that is if the ISA is in the license, then it is
15 difficult to keep it a living document, because every change
16 becomes --

17 CHAIRMAN JACKSON: Becomes a license amendment.

18 MR. CALLAN: Becomes a license amendment. It is a
19 much more ponderous process.

20 CHAIRMAN JACKSON: Right.

21 MR. CALLAN: And I think that is --

22 CHAIRMAN JACKSON: Well, that's why I asked the
23 question. I mean it seems to me that, you know, another big
24 piece would have to do with changes and how easily one could
25 make those changes.

1 MR. CALLAN: Right.

2 CHAIRMAN JACKSON: But I think --

3 COMMISSIONER McGAFFIGAN: Next viewgraph.

4 CHAIRMAN JACKSON: Right. All right. Well, no,
5 and the issue is if you treat it -- shudder, shudder, like
6 an FSAR --

7 [Laughter.]

8 COMMISSIONER McGAFFIGAN: That's what they are
9 worried about.

10 CHAIRMAN JACKSON: Well, no, because the FSARs are
11 not -- so, go ahead.

12 COMMISSIONER McGAFFIGAN: A lazier way of dealing
13 with it.

14 CHAIRMAN JACKSON: Right.

15 MS. EYCK: Okay. The ISA by itself will not
16 ensure adequate safety. An effective management system is
17 also needed to ensure that when the items are called on to
18 perform, that they indeed will be able to accomplish their
19 particular role. And this is the issue, one of the issues
20 that the industry had concerns on. We listed some items
21 that would be considered as potential candidates for a
22 management system and activities like maintenance must be
23 provided to ensure that when hardware is used as an
24 engineering control, or an engineered control, that it is
25 available and reliable to perform its function.

1 Training should be established to ensure that an
2 individual, when they are asked to perform a function as an
3 administrative control, and this happens quite often at our
4 fuel facilities, are appropriately trained and understand
5 the function that they are supposed to -- the safety
6 function that they are supposed to perform. So that is why
7 we have included these items in the ISA -- I mean in the
8 SRP, it is to give guidance to the licensee -- to the
9 reviewer and the licensee on things that could be included,
10 whether it is a human factors issue that maybe an individual
11 could take an action that could complicate a accident or
12 make it worse from a risk perspective. There could be
13 maintenance configuration management control, there's a long
14 list of them. But they are certainly requirements that we
15 are putting on all of their programs.

16 It is only on these controls and they will be
17 graded based on the fact, whether they are providing
18 protection against a right risk accident or an intermediate
19 accident. So that is how -- that was our proposal and how
20 we propose to use the information that is in the standard
21 review plan.

22 COMMISSIONER MCGAFFIGAN: The other thing that
23 comes to mind from the previous discussion, the systematic
24 approach to training requirement that's in the SRP for
25 high-risk, again, you heard industry differ with that, but

1 that is the de facto approach that's in the SRP at the
2 moment.

3 I'm partly afraid, in all honesty, as I see this,
4 that you all are taking stuff from reactor space where we
5 have, you know, systematic approaches to training and all
6 that, and these facilities may not need just as much because
7 the risks are so much lower than for the reactors.

8 But there's an awful lot of verbiage that is
9 familiar as you look at this, and it's coming over from
10 reactor space into material space, and we need to think
11 about whether we need it all in the SRP, I think.

12 MS. EYCK: Okay. Well, we, as I say, just
13 provided it there to -- basically what's there is to address
14 the high-risk items with the thought that it would be graded
15 for lesser risk, and to -- if there was a single human
16 administrative control that's going to protect against some
17 high-risk item, we wanted to make sure that we had guidance
18 on what would be an acceptable training for that individual
19 to ensure that they properly performed their safety
20 function.

21 CHAIRMAN JACKSON: It seems that the nub is in
22 what the gradation is. I mean, that's how you really
23 address the issue as to whether the requirements are as
24 onerous as they might be in a reactor situation or not, and
25 if they're not, but it's graded appropriately, then that in

1 principle should address the issue.

2 MS. EYCK: Okay. Next slide, and this deals with
3 the issue of changes that can be made without NRC prior
4 approval --

5 CHAIRMAN JACKSON: Has minimal been defined?

6 [Laughter.]

7 MS. EYCK: Well, we know that it's greater than
8 negligible but less than significant.

9 COMMISSIONER DIAZ: There you go. There you go.
10 You've been doing your homework.

11 CHAIRMAN JACKSON: Or at least you're turning into
12 a politician.

13 [Laughter.]

14 MS. EYCK: And also, we feel that it's important
15 that the change not create a possibility for an accident
16 different than those previously evaluated in the ISA, and
17 that is another important criteria for us.

18 Okay. Next slide.

19 The proposed rule also includes a risk-informed
20 graded approach for licensee reporting of events. Now,
21 reporting deviations from the safe operating conditions
22 involving nuclear criticality was covered by bulletin 91-01,
23 and that has been incorporated in the rule.

24 But the proposed rule also requires the reporting
25 when all items relied on for safety are no longer

1 operational or are degraded so that they cannot perform
2 their intended function. And the time frame for reporting
3 of such events are based on consideration of consequences of
4 concern. So it's a graded reporting of events and also the
5 timeliness for reporting of such events.

6 Next slide, please.

7 The proposed rule also contains two provisions
8 specifically addressing new facilities and new processes.
9 This was also discussed earlier. And based on staff
10 experience providing support to DOE in their development of
11 a remediation system to process the waste from the Hanford
12 tanks, the staff has realized that it's very important to
13 have new baseline design criteria to be considered initially
14 at the beginning of the design, and it's also for new
15 facilities or for a totally new process at an existing
16 facility.

17 These baseline design criteria ensure that certain
18 design principles are followed in the initial design, and
19 applicants or licensees would use these criteria, and --
20 unless the preliminary ISA submitted to NRC prior to
21 construction demonstrates that a given item is not needed or
22 to be relied on for safety.

23 Now, we get into the preliminary ISA, and
24 basically what this is is that it's no different than what's
25 done in the chemical industry. They use their hazards

1 analysis through the entire process, through design and
2 implementation. We felt that it's prudent management
3 practice for the design of a -- for a new design for them to
4 think through the risks that would be associated with that
5 activity rather than getting to the point where they're
6 ready to construct or they come in or a license and then
7 it's a question of having to go back and incorporate the
8 considerations of risks and the hazards from nuclear
9 criticality and chemical and fire into their design.

10 That's why we felt that it was appropriate to have
11 an initial preliminary ISA done, and then as they go through
12 and finish their design, build their facilities and
13 everything, then they will be finalized --

14 CHAIRMAN JACKSON: Would licensees be able to
15 begin construction of a new facility at their risk before
16 the --

17 MS. EYCK: Oh, sure. We're not --

18 CHAIRMAN JACKSON: -- preliminary ISA --

19 MS. EYCK: All we're saying is that if they gave
20 us their preliminary ISA, we could re-review it and we can
21 see that if we feel that they've addressed all the potential
22 risks, based on our experience --

23 CHAIRMAN JACKSON: But they can begin the
24 construction, and if later --

25 MS. EYCK: No problem. We don't approve it.

1 We're just going to review it.

2 CHAIRMAN JACKSON: Okay.

3 MS. EYCK: Okay. Next slide, please.

4 Okay. Well, basically in summary, the staff feels
5 that our draft proposed rulemaking is responsive to
6 Commission direction. We have added a couple things that we
7 feel are important as we have developed the rule based on
8 our experience from other activities. It is risk-informed
9 and its implementation will provide increased confidence in
10 the margin of safety at operating facilities.

11 Since 1995, as was mentioned earlier, staff has
12 been working closely with industry during the development of
13 this rulemaking process, and although staff and industry
14 have not agreed on every facet of the proposed rulemaking,
15 we feel that our views have been converging, and I think
16 that it's important to make the distinction here between the
17 rule and the standard review plan. I don't think that we
18 have heard any specific differences with what's included in
19 the specific rule; it's questions with the SRP and the
20 guidance to the reviewer.

21 But basically, as Carl mentioned, we hadn't been
22 able to share our documents with him because of the fact
23 that we were operating under a little different rulemaking
24 process than was used in Part 35.

25 In closing, I would just like to remind the

1 Commission that we have been working on this rulemaking
2 process for a long time, and that we would encourage the
3 Commission to support our publishing the proposed rulemaking
4 package for public comment.

5 Thank you.

6 CHAIRMAN JACKSON: Thank you.

7 Commissioner Diaz?

8 COMMISSIONER DIAZ: Yes. Just one comment or one
9 question that we asked before. In the issue of a license
10 renewal for this facility's licensed continuation, how will
11 an ISA that is docketed play into solving the issues that
12 you presently have?

13 MS. EYCK: I think that if we have a docketed ISA
14 that represents the program --

15 COMMISSIONER DIAZ: Docketed doesn't mean the
16 license, now.

17 MS. EYCK: Right. Oh, I understand that. But at
18 least NRC has something that represents the safety basis
19 that represents the current operation. What we're in a
20 situation now is that we get at the time of licensing a
21 discussion of the safety program. The licensees are free to
22 make changes to that program, and so what happens when it
23 comes to the time of renewal, just as it was mentioned, we
24 almost have -- we have to reconstruct the safety basis
25 because it has changed so much over time.

1 So I think that if we did have the process where
2 they did keep it up to date and it was docketed or whatever
3 mechanism that's worked out so that we did have something to
4 have a current basis, that the licensing renewal would be a
5 pro forma activity because we wouldn't have to spend the
6 enormous amount of time, both our time and the industry's
7 time now, on trying to reconstruct this safety basis.

8 COMMISSIONER DIAZ: Okay. Thank you.

9 CHAIRMAN JACKSON: Commissioner?

10 COMMISSIONER McGAFFIGAN: I think you may be a
11 little more optimistic than warranted about the lack of
12 difference on rule language. You know, a lot of the things
13 that they are raising issues about, the chemical
14 concentration level, et cetera, are in rule language, the
15 requirement that the license -- that the ISA be in the
16 license et cetera. So I think there are very significant
17 differences still remaining between you and the industry on
18 rule language as well as obviously the SRP.

19 CHAIRMAN JACKSON: Well, I want to thank each
20 presenter for providing us with very useful information in
21 terms of the Commission's decisionmaking. I want to remind
22 everybody that what's being proposed is for the rule to go
23 out for public comment, which means it's not final, and so
24 the Commission has to make a decision about that, presumably
25 together with having the SRP also be available and have

1 there be some continued work on it.

2 So unless there is any further comment, we're
3 adjourned.

4 [Whereupon, at 12:14 p.m., the public meeting was
5 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 10 CFR PART 70
PROPOSED RULEMAKING, "REVISED
REQUIREMENTS FOR LICENSING OF SPECIAL
NUCLEAR MATERIAL" --
PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Tuesday, August 25, 1998

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: Martha Brazil

Reporter: Jon Hundley

Jon Hundley

PRESENTATION BY
NUCLEAR ENERGY INSTITUTE
FACILITY OPERATIONS COMMITTEE
BEFORE
THE U.S. NUCLEAR REGULATORY COMMISSION

AUGUST 25, 1998

INDUSTRY REACTION TO SECY-98-185

- Perceived progress was illusory
- Departs from our understanding of rulemaking petition disposition
- Will not focus resources on safety-significant issues
- Is not consistent with August 22, 1997 SRM

HISTORY OF INTERACTIONS

- Industry has worked diligently with staff since 1993
- Industry has accepted the concept of ISA with graded implementation as license requirement
- Industry filed Petition for Rulemaking in fall 1996 requiring an ISA
- No meaningful evolution in the proposed rule

RATIONALE FOR LIMITED REGULATORY CHANGE

- Rigor of Part 70 implementation has increased
- Industry initiatives have improved safety
- Cost effective regulatory changes are appropriate

DRAFT REGULATORY ANALYSIS

- Fails to consider industry petition as an alternative
- Substantially under estimates cost and burdens to licensees and the NRC

INCLUSION OF ISA RESULTS IN LICENSES

- Not appropriate, not necessary
- Proposed approach is prescriptive, industry approach is risk informed performance-based
- NEI proposal achieves NRC's goals and minimizes costs
- ISA results should not be included in licenses

BACKFIT RULE

- Staff proposes to “consider” at a later date
- Staff approach could result in imposition of costly requirements without adequate justification
- Inconsistent with Commission’s directive under Part 76
- Proposed SRP criteria demonstrate need for backfit rule
- Backfit provision should be immediately effective with the rule

CONSEQUENCE CRITERIA

- Agreement with radiological criteria
- Purely chemical criteria are inappropriately being applied as regulatory limits rather than guides to ISA decisions
- Conflicts with NRC/OSHA MOU and creates potential dual regulation

MAJOR NEW CONCEPTS

- Baseline design criteria
- Reporting requirements
- Preliminary ISA

CONCLUSION

- SECY-98-185 does not provide basis for proceeding
- SRP criteria should not be utilized on ad hoc basis in existing regulatory process

RECOMMENDATION

- Industry approach should be adopted
 - requires licensees to conduct ISAs using accepted techniques, with grading based on risk;
 - requires licensees to document the results of those ISAs and to make those results available for NRC review and inspection;
 - directs licensees to identify and correct vulnerabilities identified through the ISA process;
 - assures that controls established to address those vulnerabilities are maintained; and
 - immediately-effective backfit provision

PROPOSED MODIFICATIONS TO 10 CFR PART 70



August 25, 1998

**DIVISION OF FUEL CYCLE SAFETY AND SAFEGUARDS
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS**

OVERVIEW

- Background
- Weaknesses with Current Part 70
- Approach to Rulemaking
- Major Elements in Proposed Rule
- Summary

BACKGROUND

- Revising Part 70 since 1993
- NEI petition (Sept. 1996)
- Commission approves staff's proposed resolution of Petition (August 1997)
- Staff develops proposed rulemaking package

WEAKNESSES WITH CURRENT PART 70

- Not risk-informed
- Protection against an inadvertent criticality not required
- Chemical process and fire safety not specifically addressed
- Identification of items relied on for safety not required
- Some significant facility changes not reported to NRC
- Activities such as QA and maintenance not required

COMMISSION ENDORSED APPROACH TO RULEMAKING

- Establishment of risk-informed regulatory framework based on Integrated Safety Analysis (ISA)
- Identify items relied on for safety and measures to ensure their availability and reliability in license
- Ability to make certain changes, based on the ISA, without prior NRC approval
- Establishment of graded approach for reporting events
- Defer backfitting provision until implementation of the ISA

PART 70 MAJOR ELEMENTS

- **Consequence Criteria**
- **Graded Level of Protection**
- **Performance of an ISA**
- **Incorporation of Commitments in License**
- **Changes without prior NRC approval**
- **Graded approach for Reporting Requirements**
- **Requirements for New Facilities and New Processes**

PART 70 MAJOR ELEMENTS

Consequence Criteria

- Based on existing standards
- Impacts on workers and members of the public
- Addresses radiological and chemical consequences

PART 70 MAJOR ELEMENTS

Consequence Criteria

CONSEQUENCE	Worker		Public	
	Radiological	Chemical	Radiological	Chemical
High	> 100 rem	> AEGL-3	> 25 rem	> AEGL-2
Intermediate	< 100 rem	< AEGL-3	< 25 rem	< AEGL-2
	> 25 rem	> AEGL-2	> 5 rem	> AEGL-1

AEGL - Acute Exposure Guidelines Limits developed by the National Advisory Committee Acute Guideline Levels for Hazardous Substances (AEGL-3: death or life threatening effects; AEGL-2: irreversible effects; AEGL-1: notable discomfort)

- High consequences:
 - occurrence of a nuclear criticality
 - intake of 30 mg soluble uranium by a member of the public
- Intermediate consequence: - environmental contamination

PART 70 MAJOR ELEMENTS

Graded Level of Protection

- Level of protection commensurate with consequences of identified accidents.
- Graded level of protection assures:
 - high consequence event is “highly unlikely”
 - intermediate consequence event is “unlikely”
- “Highly unlikely” and “unlikely” defined in SRP.

PART 70 MAJOR ELEMENTS

Performance of ISA

- Conduct an ISA to identify:
 - plant and external hazards and their potential for initiating accident sequences,
 - potential accident sequences,
 - their likelihood and consequences,
 - site, structures, systems, equipment, components, and activities of personnel that are relied on for safety.

PART 70 MAJOR ELEMENTS

Incorporation of Commitments in License

- Commit in license to :
 - identify and implement those items relied on for safety
 - ensure the continual availability and reliability of those items
 - keep ISA up to date

PART 70 MAJOR ELEMENTS

Changes without prior NRC approval

- Changes made without Commission prior approval, if:
 - Results in a minimal increase in the likelihood or consequences of an accident previously evaluated in the ISA; and
 - Creates no possibility for an accident different from any previously evaluated in the ISA.

PART 70 MAJOR ELEMENTS

Graded Approach for Reporting Requirements

- Codifies approach used for reporting criticality events under Bulletin 91-01
- Covers all types of safety-related events, not just criticality
- Establishes time frame for reporting based on severity of event

PART 70 MAJOR ELEMENTS

Requirements for New Facilities and New Processes

- **Baseline design criteria (New)**
 - Ensures certain safety principles are followed in *initial* design of new facility or new process at an existing facility
 - Addresses quality standards and records; natural phenomena hazards; fire protection; environmental and dynamic effects; chemical process protection; emergency capability; utility services; inspection, testing, and maintenance; criticality control; and instrumentation and controls
- **Preliminary ISA**
 - Performed and submitted prior to construction of new facility or process

SUMMARY

- Proposed rule:
 - Responsive to Commission direction
 - Risk-informed
 - Increases confidence in margin of safety
- Staff and industry views converging
- Recommend publishing proposed rulemaking package for comment