

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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1 P R O C E E D I N G S

2 [10:00 a.m.]

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

8 Following their presentation, the staff of the NRC  
9 will brief the Commission on the details of its proposal for  
10 revising the requirements for the domestic licensing of

11 special nuclear material found in 10 CFR Part 70.  
12 The process to revise Part 70 began in 1993, and  
13 various aspects were presented to the Commission for  
14 resolution in 1996 and 1997. Today, my colleagues and I  
15 look forward to hearing from all presenters to assist us in  
16 resolving issues associated with the draft rule that is  
17 presented in SECY 98-185.

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

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

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

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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

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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

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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.

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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

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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  
9  
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

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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

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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

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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

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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.

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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,

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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.

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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

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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

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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?

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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 --

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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

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

2 Maybe most important is they don't adequate  
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

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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

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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

24

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

25

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

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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

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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

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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

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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

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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 --

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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,

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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.

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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

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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

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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

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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

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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

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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

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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 subfraction, 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

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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

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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

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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

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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

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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

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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

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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.

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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

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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.

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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

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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?

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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

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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

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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

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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.

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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.

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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

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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

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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

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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.

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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,

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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

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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

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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

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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

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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

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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,

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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

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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.

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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

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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.

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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.

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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

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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.

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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, your 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

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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.

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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

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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

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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

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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.

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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

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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

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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

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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

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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.

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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.

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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,

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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

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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

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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

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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?

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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.

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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.

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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.

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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

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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

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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

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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

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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.

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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

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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.

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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

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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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