

ORIGINAL

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NUCLEAR REGULATORY COMMISSION

Title: PUBLIC MEETING ON STAKEHOLDERS'
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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

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4 PUBLIC MEETING ON
5 STAKEHOLDERS' CONCERNS

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9 Nuclear Regulatory Commission
10 Room 2B-3
11 White Flint 2
12 11555 Rockville Pike
13 Rockville, Maryland
14

15 Friday, July 17, 1998
16

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

21 COMMISSIONERS PRESENT:

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

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1 STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:

2 SAMUEL COLLINS, Director, NRR

3 HAROLD RAY, Southern Edison Co.

4 JOE COLVIN, NEI

5 DAVID A. LOCHBAUM, Union of Concerned Scientists

6 EARLE NYE, Texas Utilities Company

7 ZACK PATE, World Association of Nuclear Operators

8 LEONARD J. CALLAN, NRC

9 CORBIN McNEILL, PECO Energy Company

10 FORREST REMICK, Consultant (former Chairman, ACRS)

11 JOHN C. HOYLE, Secretary

12 KAREN D. CYR, General Counsel

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P R O C E E D I N G S

[9:33 a.m.]

CHAIRMAN JACKSON: Well, good morning, ladies and gentlemen. This meeting this morning has been scheduled to discuss concerns about the NRC's regulatory program.

In recent months the NRC has been the subject of a number of critiques, some of them sharply critical, from Congressional committees, the General Accounting Office, the nuclear industry and others. Whether or not one agrees with all or most of these criticisms, the NRC is evaluating all of these critiques as input worthy of our serious consideration.

I have tasked the NRC's Executive Director for Operations, Joe Callan, to prepare information to respond to these critiques, to prepare the agency first to assess objectively both the strengths and the weaknesses of the NRC's regulatory programs and policies; second, to better understand the impact of NRC's policies and programs on those we regulate; third, to consider how effectively we are responding to changes in the regulatory environment; and fourth, to give open-minded and objective consideration of the views and interests of NRC's various stakeholders.

The Commission is fully aware that those individuals present at the table this morning are not our only stakeholders. However, the Commission has invited

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1 these participants to continue a discussion of NRC's
2 regulatory program. I say "continue" because these
3 individuals present at the table have interfaced with the
4 Commission in a variety of ways over the years and have been
5 actively involved in the issues the Commission has chosen to
6 highlight this morning, and we have chosen the ACRS meeting
7 room today -- and there was a lot of discussion about
8 that -- to foster the atmosphere of a roundtable,
9 notwithstanding the geometry, discussion of the issues
10 before us.

11 As to the conduct of this meeting, we have
12 proposed the following areas for discussion: (1)
13 risk-informed regulations and regulatory policies; (2) the
14 reactor inspection program; (3) the NRC enforcement program;
15 (4) the use of performance indicators in the NRC's nuclear
16 plant performance assessment process; and (5) the timeliness
17 of NRC's processes -- that is, if we have time -- I'm
18 kidding.

19 [Laughter.]

20 CHAIRMAN JACKSON: Notwithstanding this proposal
21 of topics, the Commission is interested in having a
22 comprehensive dialogue with the invitees on the nuclear
23 reactor and spent fuel programs in general and will
24 entertain any topic that anyone would care to discuss.

25 We will begin by inviting opening statements from

1 each invitee. We would ask that speakers limit their
2 opening remarks to five minutes and that questions and
3 comments be withheld until we begin our open discussions.

4 We will of course in the course of the discussions
5 be able to return to cover any information that speakers are
6 unable to present as a result of the five minute
7 introduction.

8 Following the opening comments we will begin an
9 open discussion.

10 Now this meeting was originally scheduled to end
11 at 11:30 a.m., but we will continue our discussions as long
12 as we all feel is necessary. Therefore, if our discussions
13 are still proceeding, and I expect they may be, at 11:30
14 a.m., we will recess for approximately 20 minutes, both to
15 allow for collective leg stretching and to allow the
16 Commission to proceed with a scheduled public affirmation
17 session.

18 We will then reconvene and continue our
19 discussions.

20 That said, the Commission welcomes, and I am not
21 introducing them necessarily in the order in which they are
22 seated at the table, the Commission welcomes Mr. Earle Nye,
23 Chairman of the Board and Chief Executive of Texas Utilities
24 Company. He also is Chairman of the Board for the Nuclear
25 Energy Institute, which represents over 250 organizations in

1 the nuclear industry.

2 Mr. Joe Colvin, the President and Chief Executive
3 Officer of the Nuclear Energy Institute -- he has been
4 active in the nuclear associations for over 15 years
5 including a stint at INPO, and his understanding of the
6 industry and the NRC will contribute greatly to our
7 discussion.

8 Mr. Corbin McNeill -- President and Chief
9 Executive Officer of PECO Energy Company -- he has had
10 experience ranging from being a plant manager to being CEO
11 and that will be very beneficial to our discussion.

12 To my left, Dr. Zack Pate, Chairman of the World
13 Association of Nuclear Operators. He recently retired from
14 the Institute of Nuclear Power Operations, where he was the
15 Chairman and CEO. Dr. Pate brings to this table a very
16 broad view of the nuclear industry from a plant operations
17 as well as a performance measurement perspective.

18 Mr. Harold Ray, Executive Vice President of
19 Southern California Edison Company -- in addition to being
20 an NRC licensee, he has been very active in the Nuclear
21 Energy Institute's Working Group on Regulatory Issues.

22 Mr. David Lochbaum, Nuclear Safety Engineer with
23 the Union of Concerned Scientists -- UCS, as it is called,
24 is dedicated to advancing responsible public policies in
25 areas where science and technology play a critical role.

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1 UCS always has provided thoughtful input to the NRC and we
2 look forward to Mr. Lochbaum's comments.

3 Dr. Forrest Remick, the former Chair of the NRC
4 Advisory Committee on Reactor Safeguards, of course a former
5 Commissioner of the NRC and now an engineering consultant
6 involved with the nuclear industry, will give us a unique
7 perspective on the operation of the agency.

8 On behalf of the Commission, I thank not only
9 those of you here at the table, but also members of the NRC
10 Staff, Congressional staff members, and those of you in the
11 public and the press present today or reading this
12 transcript at a later date for your interest and
13 participation in ensuring that the NRC has processes that
14 maintain safety in a fair and a consistent manner.

15 The Commission is interested in comments,
16 evaluations, and proposed solutions from all participants,
17 and we look forward to an informative meeting.

18 We have made available the room adjacent to this
19 conference room which is to the right as you exit and the
20 Commission meeting room in 1 White Flint as overflow rooms
21 where you can observe the meeting if you so desire.

22 Additionally, this meeting is being broadcast to
23 both buildings here at White Flint and our regional offices,
24 and at this time we will hear opening statements from our
25 invited guests.

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1 I would like to call on Mr. Earle Nye to begin.

2 MR. NYE: Thank you, Chairman Jackson.

3 We appreciate your invitation to be with you this
4 morning and to be a part of this dialogue to consider
5 possible changes in regulatory structure and process.

6 On behalf of the Nuclear Energy Institute and the
7 nuclear energy industry, I want to comment you, Chairman
8 Jackson, and each of the Commissioners for your progressive
9 approach in undertaking this review and in calling this
10 meeting. Because there is much ground to cover today and it
11 is most important that we have the opportunity to fully
12 define some of the key issues, I will limit my remarks to a
13 few brief points with which I hope we can all agree.

14 First, the electric utility industry is undergoing
15 a period of profound change, not unlike many other elements
16 of our economy. Competition is here and the fundamentals of
17 the business have been irreversibly changed. Nuclear fuel
18 generating units are being subjected to a different and more
19 challenging form of economic standard. In many instances
20 the availability and the viability of this potentially
21 low-cost non-emitting, highly reliable technology is being
22 challenged.

23 Second, the nuclear industry is performing at the
24 highest levels of safety, reliability and effectiveness in
25 its history. I am not unmindful that the Commission has

1 sought to be constructive in this regard and I am pleased
2 that much of what has been accomplished has been through the
3 industry's initiatives, and despite this enviable record an
4 even better record of economic performance will be required
5 in the future.

6 A financial analyst with Lehman Brothers, Mr. Jim
7 Asseltine, a name not unfamiliar to many of you, said
8 recently that in the future nuclear units may have to
9 perform consistently at economic levels now being achieved
10 only by the top quartile of performers. At the NEI
11 conference in May, Jim spoke to the impact of regulation in
12 this matrix, indicating that the challenge will be to make
13 sure that the Commission can discharge its responsibilities
14 in a way that provides the industry the flexibility to make
15 adjustments in organizational structure and in operating
16 philosophies -- which brings me to my third and final point.

17 Strong, effective, and credible regulatory
18 oversight is essentially and not subject to compromise, but
19 safety is not inconsistent with efficiency, nor is
20 regulatory assurance inconsistent with innovation and
21 flexibility. The industry's current level of performance
22 provides, I think, a sound basis for the NRC to make
23 significant improvement in regulatory processes. The
24 Commission has been working hard to incorporate
25 risk-informed and performance-based approaches into the

1 regulatory process, and the industry has invested heavily in
2 this work to make safety regulation more efficient, but I
3 think we all would agree that the potential benefits have
4 largely eluded us as yet.

5 Accordingly, I am very appreciative of the efforts
6 and willingness of Chairman Jackson and the Commissioners to
7 open this dialogue with stakeholders and to undertake to
8 make significant and meaningful improvement in the
9 regulatory process of the NRC.

10 For this meeting and the subsequent deliberations
11 and initiatives, I commit that the industry will be
12 responsive and will be forthright, that we will be candid
13 and constructive. With you we commit every effort to
14 achieve meaningful enhancement of the regulatory process,
15 and I would thank you very much.

16 CHAIRMAN JACKSON: Thank you very much, Mr. Nye.

17 Let me call, if I may, on Dr. Pate. Zack?

18 DR. PATE: I would like to add my commendation to
19 the Commission for putting together this forum for
20 discussion of the issues the Chairman outlined. In the
21 not-too-distant future we will reach the 20th anniversary of
22 the Three Mile Island accident, and I think that gives us
23 good thought -- a good opportunity to pause and to think
24 about putting the post-TMI era behind us, not to forget the
25 lessons learned but to move forward to a new era that Earle

1 Nye has described.

2 My view of the plants in the U.S. are an order of
3 magnitude safer than they were at the time of Three Mile
4 Island, or orders of magnitude safer, and that gives us a
5 chance for taking a fresh approach.

6 My comments this morning will focus on what I
7 describe as a longstanding disconnect between the
8 expectations of the Commission or the EDO or other senior
9 officials at NRC and what actually happens in the field at
10 the utility and plant interface.

11 Headquarters and regional personnel routinely,
12 every day, indeed every hour, impose requirements on the
13 plants that the Commission or the EDO or other senior
14 managers would not support if in each instance you knew what
15 was happening. Time and time again over these past 18 years
16 that I have been observing, when such examples are brought
17 to the attention of an individual Commissioner or the EDO,
18 you find the situation to be just as unreasonable as I do,
19 but this continues.

20 The Tyler Sperrin study, conducted some four years
21 ago, illustrates this problem quite clearly, even
22 dramatically. More on this in a minute.

23 I am now in my third career. My first career of
24 over 20 years was in the Navy. In the Navy we had an
25 expression called "watch your whites" or "cover your

1 whites" -- if you weren't careful on board a ship or in a
2 shipyard you could get grease or oil on your sparkling white
3 uniform, but over time this expression came to have a second
4 meaning. It came to mean to keep out of trouble, to keep
5 out of the line of fire, to cover your own hide. NRC staff
6 has been very much in a cover-your-whites mode since the
7 Millstone situation developed, and the application of
8 unreasonable requirements has become even worse.

9 I will give you just one example of a recent
10 occurrence at Virginia Power. At the Surry Station and the
11 North Anna Station, two of the best performing stations in
12 the U.S. by most measures. They wanted to change the name
13 of the site director or site manager to site VP. That took
14 100 pages of documentation, and already there were many
15 other stations in the U.S. that had site VPs, so it was not
16 a new issue.

17 Coming back to the Towers Perrin study, the NRC
18 chairman at the time the report was issued objected strongly
19 to the wording of the Towers Perrin report, so I'm not even
20 going to refer to the words in the report, just to the
21 survey data presented in Appendix E.

22 Appendix E conveys some powerful messages, and
23 based on extensive recent feedback, these messages apply
24 today as well. I would like to now show a few slides that
25 are taken from Appendix E of the Towers Perrin report, and

1 these have been provided as a handout.

2 Could I have the first slide?

3 CHAIRMAN JACKSON: May we have the first slide?

4 Thank you.

5 DR. PATE: I think that's probably only readable
6 if you're close to the screen. I'm not going to dwell on
7 these slides; I'll just point out a brief highlight of each.

8 This is a survey of the industry and its site
9 executives and plant managers, and the question is your
10 assessment of regulatory activities, and the tall column in
11 each of the two graphs is frequently going beyond
12 regulation, 59 percent of the site executives in one case
13 and 63 percent of the plant managers in the other case.

14 Could I have the next slide.

15 This slide is NRC non-statutory initiatives such
16 as bulletins, generic letters, confirmatory action letters,
17 result in utility requirements that go well beyond
18 regulatory requirements, and in those cases, the tall bars
19 for both the site executives and plant managers are the
20 strongly agree or agree.

21 Next slide, please.

22 This survey question is NRC inspectors have used
23 inspection reports as a way to exert pressure to follow
24 suggestions that have little or no safety value, and once
25 again, the tall bars are the site executives strongly

1 agreeing or agreeing, and the plant managers strongly
2 agreeing or agreeing.

3 Next slide, please.

4 This is the NRC, particularly at the region level,
5 has gone well beyond existing regulations to influence plant
6 actions based on a subjective view of what constitutes
7 proper management, and here the results aren't quite as
8 dramatic, but still the strongly agree and agree bars are by
9 far the tallest.

10 Now, copies of these have been provided in the
11 back of the room and to the members of the roundtable
12 discussion, so I'm now going to go to the last slide. I do
13 encourage you to look through each of these.

14 The last slide is really a test. It says,
15 regarding plant safety, check one answer for technical
16 specifications. In this case, the vast majority of both
17 site executives and plant managers consider the technical
18 specifications very important to safety.

19 I put this slide in because it does show a balance
20 in integrity in answering these survey questions, and I
21 think it gives even more relevance to the earlier slides.

22 Once again, because of the time constraints, I
23 won't take time to show all of these to the audience, but
24 they are all available. They were selected from the Towers
25 Perrin appendix to illustrate this disconnect between the

1 expectations at the top management level for the NRC and
2 what all too often happens at the working level, and when it
3 comes my turn to speak again, Chairman, I would like to make
4 a recommendation that may be helpful in this regard.

5 CHAIRMAN JACKSON: Okay. Very good. Thank you.

6 I would like to ask -- Mr. Lochbaum.

7 MR. LOCHBAUM: Good morning.

8 Prior to joining UCS, I worked for 17 years in the
9 nuclear power industry, most of that time as a consultant.
10 I had assignments at utilities or plants with very good
11 management and very good performance results, and also had
12 assignments at plants that didn't fall into that category.

13 One of the things I observed from that experience
14 was that nuclear plant performance is a function of
15 management effectiveness more than it is a function of plant
16 age, reactor type or other factors.

17 I found that all plants can develop comprehensive
18 correction plans. Good management ensures these plans are
19 effectively implemented and are revised as necessary such
20 that the objectives are obtained. Bad management allows the
21 plan to get waylaid by emerging issues such that schedule or
22 quality or both suffer.

23 Good management uses yardsticks to measure the
24 effectiveness of changes, physical or administrative,
25 implemented at their plants. Bad management does not.

1 Good management establishes objective standards
2 which are clearly and consistently communicated to plant
3 workers. Bad management sends unclear or mixed messages,
4 either standards that are vague or ill-defined or very
5 esoteric, like excellence, and objectives which cannot be
6 obtained with the resources that are devoted to the
7 projects.

8 Good management establishes clear accountability
9 or ownership for issues. Bad management does not, leading
10 to confusion, frustration, ineffectiveness and delays in
11 getting things sorted out.

12 Good management provides workers with effective
13 procedures and policies such that most items can be
14 processed through normal channels. Bad management does not,
15 which forces the majority of items to be hand-carried
16 throughout the process.

17 NRC regulatory performance is also a function of
18 management effectiveness more than it is a function of staff
19 size, structure, or other factors. Unfortunately, the NRC
20 staff more closely resembles bad management than good
21 management.

22 The examples I choose to cite are, the NRC staff
23 often develops corrective action plans but then fails to
24 adequately monitor them to ensure that the stated objectives
25 are obtained.

1 For example, the enforcement policy, the 2.206
2 policy program, the allegation process has been revised in
3 recent years, but they are no better than they were a decade
4 ago.

5 NRC staff does not consistently enforce criteria,
6 whether they are 10 CFR 50 regulations or their own
7 policies. For example. DC Cook was shut down last September
8 due to LOCA concerns under certain postulated conditions,
9 yet suction strainer issues at boiling water reactors, which
10 actually did happen at two plants in this country and had
11 virtually the same consequences, did not result in the
12 shutdown of any of those affected plants.

13 The NRC staff seems to lack clearly-defined
14 accountability for its action. For example, a recent UCS
15 allegation involving Millstone Unit 3 was handled by NRR
16 until the week after the restart vote, and then it was
17 passed back to Region I with no action having been taken.

18 The NRC staff suffers from a lack of continuity.
19 For example, allegations, 2.206 petitions and other issues
20 raised by UCS routinely get reassigned from one interim or
21 transient individual to another without much action being
22 taken.

23 In summary, if the NRC measures itself against the
24 same high standards it requires and expects of its
25 licensees, we might not be here this morning.

1 Thank you.

2 CHAIRMAN JACKSON: Thank you very much.

3 I realize that I have been somewhat presumptuous
4 in assuming that most people in the room would know who all
5 of the members of the Commission are and the senior managers
6 at the table, and so I should not have made that assumption
7 and I apologize to them, and so I would like to introduce my
8 colleagues on the Commissioner.

9 Commissioner Nils Diaz. Nils has had many years
10 of experience in the nuclear arena and came to the NRC from
11 the University of Florida.

12 Commissioner Edward McGaffigan on my left had a
13 distinguished career in the Foreign Service and many years
14 on Capitol Hill, and so he knows the ins and outs of
15 Washington better than I do.

16 I would like to introduce Joe Callan, a.k.a.
17 Leonard J. Callan, who is our executive director for
18 operations, and Joe I think will bring an interesting
19 perspective, having come to his current position formerly
20 having been the regional administrator in our Region IV
21 office.

22 I would also like to introduce Sam Collins, who is
23 our director of the Office of Nuclear Reactor Regulation,
24 and people think that we raided Region IV because Sam was
25 the deputy regional administrator of Region IV before he

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1 came to his present position.

2 Also seated at the table at a right angle to me,
3 or to the right, is Karen Cyr, our general counsel, and to
4 her right, my left, is Mr. John Hoyle, who is our secretary.

5 So with that, I would like to continue and call on
6 Mr. Joe Colvin.

7 MR. COLVIN: Thank you, Chairman. Good morning.

8 I also thank you very much for this opportunity.
9 I think it's an excellent opportunity for us to have a
10 candid discussion, and I thank the Commission and appreciate
11 yours and the Commission's leadership in providing this
12 opportunity.

13 In your discussions that you have had and your
14 memos that you've sent out regarding this meeting, you have
15 asked for specifics, and I wanted to tell you that we are
16 going to talk some specifics, and I'm ready to do that, but
17 first I would like to speak to a few -- what I would
18 consider some over-arching issues, and with that, perhaps I
19 could have my first slide, please.

20 CHAIRMAN JACKSON: Mr. Colvin's slide. Thank you.
21 No, it's not -- is that?

22 MR. COLVIN: No, that is not my slide, Madame
23 Chairman. It's entitled, "Industry Goals for the Regulatory
24 Environment." Great.

25 What I wanted to do was to speak for a minute, as

1 I said, on these over-arching issues. And I think that we,
2 as the industry, share similar goals with you, as the
3 regulator, on what we need to ensure that we have a proper
4 regulatory process in place. And I think these points
5 illustrate that.

6 We do need a credible regulatory agency as viewed
7 by the public, by the Congress, by the industry. We need to
8 have mutual trust and confidence in the regulatory process,
9 and I think we need to work -- our goal is to have a
10 non-adversarial relationship. We certainly need
11 consistency, predictability and stability in the process.

12 We desire full recognition of the industry
13 improvement activities by the agencies and I think a clear
14 definition of the roles between NRC and the industry where
15 we have a common mission, which in fact is the safety
16 mission of the agency and the industry.

17 Next slide, please.

18 There are some perceptions I did want to just take
19 a moment on to share with the Commission, and with the
20 participants, from the industry as the regulatory process
21 exists today. An increased number of rules and regulatory
22 actions. Some regulatory actions we believe circumvent the
23 rulemaking processes. We see that the advice of experts and
24 other advisory bodies is not fully utilized. We see the
25 acceptable regulatory standard as a changing target above

1 what is compliance with the rules. The basis of many
2 actions appears to be opinion or re-interpretation or
3 interpretation of what is required.

4 We see some examples of bulletins and Generic
5 Letters misused. We see that a lot of the requests that
6 take place really have little regard for some of the real
7 impact on management, people or costs.

8 We see the -- I'm sorry, the next slide, please.
9 Inconsistency between headquarters and regions. An increase
10 in inspection efforts and in resulting impact on the plants.
11 Some injection into management decisions and the management
12 issues.

13 And, basically, the last issue is not responsive
14 to some of the changes that are needed in the industry.

15 Now, I show these slides really because they
16 depict -- these last two slides, I think, in my view, depict
17 at a high level some of the problems that have continued to
18 exist in the regulatory process over many years, and I would
19 be remiss if I didn't tell you that these were the slides
20 that I used before the Advisory Committee on Reactor
21 Safeguards and later with the Commission in August of 1989.
22 And I think they are illustrative of the nature of the
23 problems that we need to address and I think we have the
24 opportunity to address with this forum.

25 I have participated in five previous initiatives

1 of similar nature with five previous Commissions, and,
2 unfortunately, although we have made quite a bit of change,
3 we really have not made the change needed, or what I would
4 characterize as the real change needed to move forward in
5 this regulatory environment.

6 I am optimistic that today that we have a new
7 opportunity, and that comes about from the leadership of
8 this Commission and the dedication, and we are ready to
9 support that.

10 I think there are two other issues which are
11 really factors which add to that which give me the
12 confidence that we will be able to make these changes. And
13 that first issue, Mr. Nye has talked about, and that is the
14 issue that there is a change needed to be ready to regulate
15 this mature industry through the transition to competition
16 and into the 21st Century. I mean that change is absolutely
17 necessary because we cannot continue going -- regulating the
18 business that -- the business is changing and we need to
19 change the way we regulate it and still maintain public
20 health and safety.

21 And I think the second point, which is also very
22 important, is that we have today an increased recognition of
23 the important role that nuclear energy plays in the United
24 States, that is coming about in the policy arena, policy
25 makers and certainly with the United States Congress. And

1 there is an increasing amount of Congressional interest in
2 these activities, and I think that is very constructive, and
3 we have a good opportunity to take advantage of both of
4 those factors, along with the Commission's leadership, and
5 we look forward to participating in this discussion.

6 Thank you, Chairman.

7 CHAIRMAN JACKSON: Thank you very much.

8 Dr. Remick.

9 DR. REMICK: Thank you very much, and I want to
10 join in congratulating the Commissioners on holding a
11 stakeholders meeting, and I appreciate having been invited.

12 I have had a wide variety of interactions with the
13 NRC and its predecessor agency, the AEC, over a period of
14 about 42 years, so I do feel I bring a somewhat unique
15 perception to this meeting.

16 I have seen the agency extensively from the inside
17 and from the outside, and I feel very much at home in this
18 agency and with its people. I have the highest respect for
19 the NRC, its important mission and its people.

20 But I also have some differences and concern about
21 the agency's direction and its future. There are a number
22 of things that I considered saying to you today, but I
23 believe there are others at this table who might best
24 address many of those points. But there are some things
25 that maybe I am in a best position to say. Therefore, I

1 wish to share with you some perceptions of the NRC today.

2 To conserve time, I'll go to the bottom line in a
3 direct and perhaps blunt manner, sharing with you what I see
4 from my perspective, and when I say "you," I mean the agency
5 in general. However, because of my past relationship with
6 the NRC, it gives me some discomfort and pain to be so blunt
7 in a public forum, but I take your interest in hearing from
8 your stakeholders as sincere.

9 Further, to the best of my knowledge I have no ox
10 that might be gored. My comments are meant to be
11 constructive and are provided with respect for you and your
12 various positions.

13 Much of what I read that you say as a collegial
14 Commission, I can agree with. But to be blunt, the
15 Commission does not know in detail how the agency's programs
16 are being performed in the field. And after all it is said
17 that performance is what performance does. As a result, you
18 have lost some credibility and are losing credibility on the
19 Hill. You are being seen more and more as an agency with
20 problems, thus, you are being seen as a problem agency.

21 The over-emphasis on blind adherence to strict
22 compliance, with very confusing regulations, and strict
23 compliance with documents never intended for that purpose,
24 is in some cases diverting plan personnel's attention from
25 more safety-related activities.

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1 Direction to the staff to write up anything they
2 see that appears to be wrong, whether or not it falls under
3 the regulations, is not only questionable, but wasteful.

4 It is my fear that rather than maintaining or
5 increasing nuclear power plant safety, this trend may be
6 resulting in reduced attention to safety. As a result, you
7 are losing credibility with many of your licensees, who, in
8 return, are losing respect for the agency and its regulatory
9 process. You are seen as having lost focus and perspective
10 on what constitutes safety and adequate protection of the
11 public, and are striving instead to duplicate industry's
12 initiative of seeking excellence in plant operation.

13 You speak of striving to be risk-informed, and you
14 speak of the need for performance-based regulatory
15 implementation, but little impact is seen in the field. In
16 fact, there appears to be great reluctance to accept
17 risk-informed insights as justification for considering
18 change. Further, you are seen as neither being fully
19 committed to the various pilot programs that have been
20 undertaken or underway, nor implementing or taking advantage
21 of the results.

22 The Commission is seen as a highly bifurcated
23 body, not a unified, collegial body. Rumors of in-fighting
24 are rampant, both internal and external to the agency. As a
25 result, many of the staff are perceived as being hunkered

1 down and afraid to make decisions, and reviews and decisions
2 are seen to languish with numerous further requests for
3 additional information seen as delaying tactics. This, I
4 believe, is the basis for industry's concern over timely
5 license renewal reviews. The morale of some staff is low
6 and a number are seen as biding their time to retire or wait
7 for change. The agency has lost much technical expertise
8 and regulatory knowledge and memory, and I can also say that
9 for the national laboratories that you use extensively.

10 The agency is highly intrusive into the day to day
11 activities of licensees. Little, if any, change or relief
12 is seen based on improved plant safety and operation. For
13 better, but also for worse, this intrusiveness in large part
14 drives what goes on at the plants on a day to day basis.
15 The intrusiveness is largely based upon highly subjective
16 criteria which NRC residents, and regional and headquarters
17 personnel would like to see done at the plants and
18 frequently with the best intent. But finding the
19 relationship to public safety, or to the Commission's
20 regulations is frequently difficult to see. The influence
21 of and the discipline prescribed by the Backfit Rule is not
22 evident in this subjective ratcheting.

23 The influence of subjective SALP ratings, or of
24 subjectively being placed on a Watch List play a large part
25 in what drives many day to day activities at plants whether

1 or not the activities have a safety nexus. The subtle
2 threat or fear or adverse SALP scores or being placed on the
3 Watch List are an effective means of getting licensees to
4 make changes that the staff wants. Many such changes would
5 not meet the criteria of the Backfit Rule or be solidly
6 anchored in the Commission's regulations.

7 For example, the use of Confirmatory Action
8 Letters has grown by leaps and bounds recently, and these
9 are viewed as convenient techniques to obtain changes that
10 the staff wants done, while getting around the Backfit Rule,
11 the regulations and the Commission. And if you doubt this,
12 I urge that you read all the CALs issued in recent months
13 and ask the following about the actions being, quote,
14 "confirmed."

15 What is the relative safety significance of the
16 individual actions being, quote, "confirmed"? Are the
17 actions, in effect, new requirements? Where are the actions
18 specified in the regulations? Do the actions meet the
19 criteria of the Backfit Rule? Is the letter truly, quote,
20 "confirmatory," or has it been previously written and is
21 being imposed?

22 If the actions being confirmed are not safety
23 significant or not specified in the regulations, what place
24 do they have in a Confirmatory Action Letter? And I can say
25 the same thing about some of the Confirmatory Orders of

1 recent date. It would also be an interesting exercise to
2 read a large sampling of Inspection Reports or sit in on
3 inspection exits and ask some of the same questions about
4 matters being addressed.

5 Now, I think I have said more than enough to help
6 kickoff this discussion. Much of what I have said, I am
7 sure you have heard before. But what you as an agency do
8 about it is what is important. And I thank you very much.

9 CHAIRMAN JACKSON: Thank you.

10 Mr. McNeill.

11 MR. MCNEILL: Thank you very much, Madame
12 Chairman. I really do appreciate the opportunity to
13 participate in this forum and really commend the Commission
14 for providing such a forum for discussion.

15 Although I didn't plan it this way, I think some
16 of you in the room know that just this morning we, as PECO
17 Energy, and our partner, British Energy, made an
18 announcement that Amergen, which is our partnership company,
19 has signed a Letter of Intent to purchase Three Mile Island
20 Unit 1, which after about 90 days of due diligence review,
21 we would then expect to file the appropriate regulatory
22 filings for the license transfers.

23 I believe that this event really does signal the
24 beginning of a major restructuring of our nuclear power
25 industry and that is reinforced by the fact that, as we have

1 gone out and discussed our concept with other owners,
2 clearly, there is an expectation that there will be
3 significant consolidation within the industry. And don't
4 underestimate the strength of this movement. I think the
5 economics that Earl Nye has described in terms of
6 competition are a very, very strong force that will begin to
7 move the industry along and, although that course can be
8 shaped somewhat, I don't think that there will be a reversal
9 of it.

10 I personally believe that a lot of these changes
11 are good, that they will in fact continue to improve safety.
12 Many people think that these kinds of deregulations are in
13 fact going to detract from safety, but I frequently point to
14 the airline industry, which has now been deregulated some 20
15 years or so, where, in fact, there has been improved airline
16 safety. Almost every year we have seen significant
17 improvements over that full 20 years.

18 We are also going to eliminate inefficiencies
19 through improved processes and performance, which I believe,
20 and I will discuss a little later, in fact, produce better
21 results. The pressures for speed, time, profit, in fact, if
22 done correctly, will improve the overall efficiency and
23 performance of our industry.

24 However, full success will only come through an
25 efficiently integrated industry, which includes the

1 regulator. We are an industry that has already changed
2 appreciably as we have moved from a design, construction
3 based industry to an operations based industry, and where
4 the regulator's role has shifted more toward monitoring of
5 operation.

6 But many of the existing practices that we utilize
7 in the field today were derived from processes that had
8 their genesis in the design licensing, construction
9 licensing and review. And it is not clear to me that that
10 is an appropriate basis for an ongoing operating regime that
11 we see, in fact, in the industry today. We now have nearly
12 40 years of experience and I think that it is time that we
13 consider revamping the regulatory scheme.

14 Revamping should include consideration of new
15 methodologies such as risk-informed, performance-based
16 regulation, as embodied in the maintenance rule. But it
17 must also include consideration of the elimination of
18 methodologies that are ineffective, inefficient or produce
19 unintended negative behaviors such as those highlighted by
20 Dr. Pate.

21 In addition to introducing methodologies, as I
22 have mentioned before, we also need to increase our speed.
23 And this may seem counter-intuitive, but I think it is
24 necessary to recognize the fact that concentration on speed,
25 in fact, provides an impetus to create processes that have

1 little room for error, that demand a discipline.

2 For example, one of the elements of improved
3 performance in our industry over the last several years has
4 been shortened outage lengths, and we have done that,
5 accomplished that by improving the quality of our work, by
6 improving the coordination of our work groups, and driving
7 for speed and accomplishment. We have actually done that, I
8 think, by continuing to concentrate on safety and
9 maintaining safe plant configurations. Speed and safety are
10 not mutually exclusive. We know that it can be done from
11 our experience.

12 While our industry must continue to demonstrate
13 high levels of performance and safety, we need to make sure
14 that the same kind of performance exists in our regulatory
15 regimes. We have seen success in adopting the maintenance
16 rule, and Joe Colvin has just briefly outlined, and Harold
17 Ray will continue to expand on the framework of a revised
18 regulatory oversight process. And I believe that the
19 industry, from its regulators through its suppliers and
20 OEMs, through to our operators, and whether they are going
21 to be utilities, true utilities, or generating companies,
22 through to our customers and on to the environment, will be
23 well served by consideration of some regulatory regime.

24 Thank you.

25 CHAIRMAN JACKSON: Thank you very much.

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1 Mr. Ray.

2 MR. RAY: Thank you, Chairman Jackson, for this
3 opportunity. I hope I can represent my fellow chief nuclear
4 officers, distinguished member, of which General Hanlon, I
5 see is in the audience, and he can certainly speak for
6 himself at the appropriate time.

7 If I could start with overhead 1, please. Let me
8 see if we've got into the right set here before I begin.

9 Yeah. First I'd like to talk about the need for
10 objective priorities throughout the regulatory process. I
11 perceive that there's a widespread of not universal
12 agreement on all sides that nuclear safety would be enhanced
13 by more objective prioritization of available resources.

14 I say this notwithstanding that I also believe
15 that the level of safety achieved in the industry today is
16 entirely acceptable, but we all know that while we may be
17 able to do anything well, none of us can do everything well.

18 Because we cannot yet consistently discriminate in
19 importance among the things which are subject to regulatory
20 interest, we too often dissipate our resources on what is
21 easy, but frequently unimportant, and fail to address what
22 is difficult, but frequently far more important to safety.

23 On the subject of dissipation of resources, at the
24 risk of tempting fate and recognizing that anything I say
25 about my plant will, by definition, be self-serving, let me

1 nevertheless give a concrete example, if I may.

2 As the Commissioners may know, San Onofre is one
3 of those licensees which manage plant risks to a real time
4 all mode plant safety monitor. We use this in addition to
5 programs which comply with regulatory requirements.

6 Management bonuses are tied in part to the
7 computed core damage frequency. By contrast, neither SALP
8 nor INPO rating figure into the management bonus program.

9 We believe this promotes a strong safety culture
10 at San Onofre which is based on good understanding of what
11 contributes to risk.

12 We also believe this is reflected in conservative
13 operating practices from a compliance viewpoint. It has
14 been over six years since any of the three units received a
15 civil penalty.

16 However, in seeming contrast to this, San Onofre
17 has often been either the highest or among the highest
18 plants in the country for the number of non-compliances
19 issued, including plants on the watch list.

20 Why is this? I believe the record is clear,
21 including as described in the SALP reports and meeting
22 discussions.

23 I'm a long -- lifelong believer in the use of
24 detailed, prescriptive procedures for the conduct of work
25 where the probability of error may be small, but the

1 consequences may be large.

2 I also believe in the value of programs which,
3 although they may be complex, have the virtue of making it
4 more difficult to propagate an error, once made.

5 A natural result of this is that it is easy to
6 assert on any given day that someone somewhere failed to
7 literally comply with a program or procedure.

8 Since January, 1997, San Onofre has receive 21
9 cited and 22 non-cited violations for failure to strictly
10 follow procedures. In only a few cases did these
11 non-compliances have any safety significance whatever in our
12 view.

13 Now do I approve or even passively tolerate
14 procedure non-compliances? No, I do not.

15 Is it a violation of regulatory requirements?
16 Yes, it is.

17 Do I think the NRC should ignore any violation of
18 requirements? No, I do not.

19 But, finally, was it an appropriate use of
20 licensee and regulatory resources to process a total of 43
21 violations including identification and verification of
22 correction action to prevent occurrence?

23 No. I certainly do not.

24 Instead, I believe we should be able to address
25 procedure non-compliances ourselves, unless some objective

1 measure were to demonstrate that it was a reflection of
2 fundamental deficiency in the safety culture which
3 threatened to result in deficiencies in plant operation and
4 significant safety risk.

5 This is an example of valuable resources being
6 dissipated on the easy regulatory intervention and issues of
7 procedure compliance, with little or no safety significance
8 instead of coming to grips with how to implement the
9 available technology, to focus on real safety issues,
10 namely, the quantification and minimization of the risk of
11 core damage, oiling in the core, large early release or
12 whatever.

13 Now I'd like to also touch on the importance of
14 consistence policy direction to change. We conclude this
15 overhead by observing something I'm sure we all know.

16 In any large institution, mine included,
17 successful achievement of change demands consistent policy
18 direction, applied over what seems at least to be a long
19 time. And it is the inability to maintain this consistent
20 direction and the need to capture quick rewards whenever you
21 can. It is the reason the staff always wins in the end, or
22 almost always.

23 The Commission must adopt a policy direction and
24 maintain it over a significant period or the spring rebound
25 as soon as the force is removed or redirected by some new

1 crisis.

2 The change required to implement risk informed
3 regulation, as you Commissioners know all too well, is a
4 prime example of the difficult challenge which will never be
5 met so long as we continue to dissipate resources on what is
6 easy.

7 May I have my second overhead, please?

8 My fourth point is that safety and compliance can
9 be demonstrated to be congruent. It's the objective,
10 determination and priorities, which we indicate, can
11 demonstrate congruence between what is done in the name of
12 compliance and what is required to efficiently achieve an
13 acceptable assurance of safety.

14 But the quest for perfection in the process is the
15 enemy of the assurance of adequate safety, would be my
16 hypothesis. Thus far, I can only say that the normal
17 bureaucratic incentive to seek perfection in the process is
18 indeed proving to be the enemy of our ability to assure
19 adequate safety with acceptable efficiency.

20 Without attempting to provide examples at this
21 point, owing to the lack of time, this problem is manifest
22 in the seeming impracticality of agreeing on a reasonable
23 path for implementing probability models and regulatory
24 space.

25 We see it also in what the industry experiences as

1 the excessive time required thus far to implement individual
2 risk-informed incentives for regulatory changes.

3 The kind of explicit policy direction that the
4 Commission has provided with respect to 10 CFR 50.59 is
5 going to continue to be required if we are to be able to
6 move ahead in developing objective tools for assuring
7 nuclear safety.

8 And, finally, on the point of latent regulatory
9 ambiguity that I feel must be addressed. 10 CFR 50.59 is an
10 example of where regulatory ambiguity was allowed to exist
11 for a long period to the point that when the Staff moved to
12 enforce its interpretation, it was clearly viewed with
13 justification as a significant change by the industry. The
14 true purpose and function of the FSAR and the definition of
15 design bases with respect to safety margin are other
16 examples.

17 As you know, the buck stops here, with you, on
18 these matters, and licensees should be able to depend on
19 consistency of interpretation by the agency as revealed in
20 its practice until and unless a formal change process is
21 followed. But I want to hasten to acknowledge that the
22 Commission has recognized situations where perceived
23 ambiguity exists, has undertaken to provide clarification,
24 meanwhile granting the industry a period to adjust.

25 Nevertheless, as I think Mr. Colvin mentioned, the

1 industry does feel that changes are occurring without, in
2 all cases, following the Commission's own process for
3 change.

4 My third and last overhead, please.

5 Again, quite coincidentally, and without knowing
6 what Corbin was going to say at all, I want to end on the
7 new challenge for regulatory process which he so well
8 illustrated.

9 I would maintain the majority of licensed power
10 reactors will not be in cost-of-service rates within five
11 years. My company is licensed at two sites, San Onofre and
12 Palo Verde. There are four owners at one and six at the
13 other.

14 In the case of Palo Verde, there are six separate
15 rate-setting jurisdictions in four states, and this is not
16 unique.

17 I could go on, but looking at time, let me just --
18 and given, as I say, that Corbin has already made the point
19 much better than I can, in any event, let me just say my
20 last two points.

21 The sale or transfer of ownership to non-electric
22 owners will accelerate, and the point has been well made
23 already.

24 Finally, NRC actions to prepare for this change
25 need to continue to expand, and let me conclude with what I

1 mean by that. I want to acknowledge that the Commission has
2 moved in response to this change, and the industry has
3 responded, we hope, in support.

4 Thus far, we have addressed financial
5 qualification, both for decommissioning and now for
6 operations. The Commission has also considered related
7 issues such as grid reliability, but I would urge you to
8 continue to give attention to this important area and
9 determine if there are other issues which need to be
10 addressed.

11 I was recently at an energy forum in which a
12 former Commissioner, not present in this room, opined that
13 the fundamental precepts of reactor regulation may be
14 inconsistent with the concept of a merchant nuclear plant.
15 I don't think they are, but I would hate to find out after
16 the fact.

17 Rather than repeatedly remind ourselves that we do
18 not know how restructuring will turn out in detail in every
19 location, I suggest the Commission simply create a straw man
20 merchant plant, and ask themselves if they are fully
21 prepared to grant a license for operation.

22 Thank you.

23 CHAIRMAN JACKSON: Thank you very much.

24 What we decided was that those of us internal to
25 the Commission would not necessarily make opening statements

1 in the interest of time, but in addition because we are
2 primarily here to listen and to have our dialogue through
3 the back-and-forth we hope to have, but I do want to offer
4 my Commission colleagues the opportunity to make any initial
5 remarks they may wish to make. Otherwise, we can launch
6 into our discussions.

7 Commissioner?

8 COMMISSIONER DIAZ: Thank you. I was not ready
9 for any prepared remarks, but I do want to go back to
10 something that is kind of overriding theme, and that is the
11 issue of how do we regulate versus how should we regulate,
12 and I think that is the bottom line.

13 There is an issue that keeps coming up, and I
14 think Mr. Ray referred to it. It's the issue of risk
15 information and then I think Mr. McNeill called it risk
16 information performance base. I want to repeat myself, that
17 it is important that we understand that these things are not
18 tied together all the time; that the issue of tying
19 risk-informed with performance base makes it difficult,
20 makes it expensive to implement, and that there are benefits
21 in becoming risk-informed that are beyond what the use of
22 the tool in itself means.

23 Let me take a minute on that. Risk information,
24 more than actually a tool to determine when something should
25 happen or not, can and maybe should become a regulatory

1 philosophy in which an envelope of safe and adequate
2 operation can be bound by risk information and what we know
3 today. If we try at the present time to add
4 performance-based like we did in the maintenance rule or
5 Appendix J, that is very resource-intensive, and the
6 industry, I know, is resistant to anything that is very
7 resource-intensive, maybe for the reasons that we don't know
8 what the economics of the industry are.

9 However, the issue of how is risk information used
10 needs to come between the industry and the NRC to some
11 resolution in a reasonable period of time, and I suggest
12 that the first step is to just really separate what
13 performance-based regulation is from what risk information
14 is, because as long as you tie them together, you are making
15 it more difficult, more resource-intensive. It is vital
16 that this point, as we go forth, be brought to some
17 conclusion in a reasonable period of time because if not, we
18 keep spending resources and talking about it without getting
19 it to conclusion.

20 CHAIRMAN JACKSON: Commissioner McGaffigan?

21 COMMISSIONER MCGAFFIGAN: My first comment will be
22 I hope we let Joe --

23 CHAIRMAN JACKSON: I plan to.

24 COMMISSIONER MCGAFFIGAN: -- in the second talk,
25 because I think there are several things that have been said

1 that they need to talk about.

2 The second point is I do think that one of the
3 themes that comes across about the need for greater speed on
4 the part of the regulator in a decommissioned, regulated
5 industry is on the mark. I think in an all-hands meeting,
6 in my second month on the job, an internal all-hands meeting
7 we have on the green out here, I made the point that the old
8 model of a ponderous industry dealing with ponderous state
9 utility commissions and a ponderous regulator was not going
10 to be viable for very much longer, and yet what we need is
11 -- probably mostly us, but we need some help in figuring out
12 to speed up our various processes, our processing of license
13 amendments, our processing of rules, our processing of other
14 items that come before us.

15 The one case that Mr. Pate, I do want to comment
16 on, because you did say at one point that we oftentimes,
17 when things come to our attention, we disagree with the
18 Staff, that the famous or infamous license amendment request
19 to change the titles unfortunately at North Anna or Surrey
20 -- I'm not sure which -- the trouble there was, as I
21 understand it, and the Staff can expand, they had not
22 removed from the administrative section of the tech specs
23 these titles, and so a tech spec amendment was required
24 under the current rules. Should a tech spec amendment be
25 required in order to change the titles? I think the

1 Commission and the Staff would be unanimous in saying no, we
2 have got to figure out how to change the rules so that
3 something like that isn't required. But, unfortunately, the
4 plain English of the rules in that circumstance requires it.
5 Apparently the Staff, several years ago, had -- and as
6 people implement and approve standard tech specs, they are
7 getting all that stuff out of the tech specs, but you end up
8 with this old framework, this old prescriptive deterministic
9 framework hanging around, driving us to do some things that
10 are trivial, and we don't know, in all honesty, how to get
11 to this risk-informed-performance-based-as- we-can-get-it
12 framework that's perhaps epitomized in the maintenance rule.

13 So I'd be interested -- examples like that point
14 out the problems with the old framework, and yet do we say
15 despite the rule, that you don't have to apply for a tech
16 spec change here, or do we -- I mean I don't know what the
17 answer is there, but we ran it down -- Joe Callan and Sam
18 can talk more about it -- but it isn't worth a lot of talk.
19 It is a good example of the old framework requiring
20 something that is silly and requiring Staff review that
21 shouldn't -- it should be secretarial, processing that
22 amendment. But yet we have this framework on the books, and
23 I don't know how to get it off the books without a massive
24 rulemaking procedure following the Administrative Procedure
25 Act that gets it off the books. So that's my --

1 CHAIRMAN JACKSON: I'm going to come back to that,
2 but let me let Joe and then Sam make a few comments, if you
3 would care to.

4 MR. CALLAN: With the same disclaimer that
5 Commissioner Diaz made, that we didn't prepare any opening
6 comments. I'll just say -- I'll make three quick points.

7 One is -- and this may surprise you all -- but I
8 would say the vast majority of the issues raised today, as
9 well as the issues that we have read about, resonate very
10 strongly with the Staff in a positive way. Certainly all
11 the senior Staff and mid-level managers. The Staff is ready
12 for change. The Staff is receptive.

13 Having said that, I think it's important to
14 remember that myself and all the senior Staff in the NRC
15 served our apprenticeship, as most of you did, during a
16 period that was quite a bit different than today. And many
17 of the senior Staff, myself, for example, made a career out
18 of going from one problem situation to another problem
19 situation to another problem situation. So our life
20 experience has shaped us in a way to be somewhat jaundiced,
21 skeptical in our view, and we recognize that the industry
22 has changed dramatically since that period, and our views
23 are changing, but indulge us a little bit in the fact that
24 we are who we are because of our life's experience.

25 And finally, this is a point that Dr. Pate made,

1 and several others touched on it, I am acutely aware of the
2 fact that much, much of the mischief occurs at the level of
3 the 180 or so residents we have out in the field and the
4 70-plus plant managers, operations superintendents,
5 maintenance managers, every day, every week, at the
6 implementation level.

7 So what's elegant with us in this room, an elegant
8 solution here or an elegant solution in a Commission
9 meeting, may not be elegant if it can't be implemented
10 properly.

11 So we have to be mindful of that. I think that's
12 a very critical issue. We have to come up with processes
13 that are robust and, again, to play off Dr. Pate's approach
14 to using a Navy metaphor, we also had a Navy metaphor in my
15 experience where we talked about processes or activities
16 being sailor-proof. Processes that are robust enough to be
17 implemented at the lowest level consistently day in and day
18 out.

19 So I think we need to always be aware of that.

20 CHAIRMAN JACKSON: Mr. Collins?

21 MR. COLLINS: Thank you. I am going to be very
22 brief.

23 My view is that the Office of NRR is receptive to
24 these issues, as has previously been stated. Some of them
25 perhaps have a history, historical in context, but still

1 pertinent as we do business today. I think it's a
2 beneficial dialogue, self-examination is good at any point,
3 not only for the industry, but also for the NRC and its
4 offices.

5 I would make a comment that a lot of the
6 conversation is directed for various reasons and perhaps not
7 inappropriately in all cases to the individuals in the
8 field. I'd just like to make a comment that I can't
9 disclaim knowledge of what goes on in the field. I was a
10 resident inspector, I was a senior resident inspector, I
11 have managed all three divisions in one region office and
12 assisted Bill Kane in Region I. I feel like I have a good
13 handle on what goes on in the field. It's easy for us to
14 cast down to the implementers. In fact, if you read an LER,
15 most LERS indicate personnel error. They don't talk about
16 management systems; they don't talk about senior managers at
17 the plants, or senior vice presidents and their involvement
18 in the processes. We point to the people who do the work.

19 I would like to acknowledge that most, if not all,
20 individuals that I have been associated with in the field do
21 their work honorably; they do it based on good intentions
22 for guidance; and it's our managers' job to provide that
23 guidance and provide the oversight. And I would just like
24 to acknowledge that.

25 With that, I would echo what Joe indicated and

1 that is there is a lot of work going on presently; some in
2 the areas we have mentioned; some in other areas. Work in
3 progress is a promise, but I'm here to tell you that our
4 office is expending a lot of time on these areas. More
5 recently, perhaps, but also historically, since Joe and I
6 have been here, we have been self-examining not only how we
7 do work, but what the products are and if they are
8 serviceable for the industry and what their impact is. And
9 I see this effort as a good dialogue to continue that, and I
10 look forward to what comes out of it.

11 That's all.

12 CHAIRMAN JACKSON: Thank you.

13 There is always a challenge in a discussion like
14 this. We all have our lists of -- litany of items that have
15 particularly bugged us over the years and/or formed examples
16 of what is fundamentally wrong with the regulatory process.
17 The challenge becomes how does one begin to create some
18 order out of the chaos, and move forward in good faith, and
19 in that regard, I thought that it would be useful in terms
20 of how we proceed for us to try to give some structure to
21 our discussions, along the lines that I discussed. But
22 there is a fundamental question on the table having to do
23 with how we manage our programs that I think we have to
24 discuss. Perhaps it's threaded through all of the other
25 topical areas, but I would like to ask you to just kind of

1 keep the following overarching questions in mind, and that
2 is, what are the key opportunities for change for the NRC,
3 to see if we can be solutions-oriented. Has the industry
4 availed itself of opportunities for change, and are there
5 others, either on its own or working in partnership with the
6 NRC, that make sense. What commitments then from the NRC
7 make sense, and what commitments are needed from the
8 industry in order for our commitments to make sense.

9 I will give you an example, two examples that lead
10 me to ask those questions. The first was the one having to
11 do with the example that was raised by Dr. Pate and that
12 Commissioner McGaffigan spoke to, namely the issue about the
13 name change for an officer in a plant requiring a tech spec
14 amendment, and whether or not there is a need for rule
15 change or some such in order to be able to sweep that kind
16 of thing away.

17 Now my understanding was that the tech spec
18 improvement program, namely the adoption of improved
19 standard tech specs, was supposed to be a mechanism for
20 addressing that kind of issue and to have in one fell swoop
21 an opportunity for a plant to have a tech spec, set of tech
22 specs that would not have this kind of trivia, and then the
23 question becomes, what happened then if in fact we are still
24 left with a situation where this kind of situation occurs.
25 And is the difficulty there having to do with the scrub not

1 having been complete enough at the time, if that's been
2 done, for the particular plant in mind, or is it some
3 failing on our part. So that's what I mean when I say have
4 we all availed ourselves of the opportunities, because
5 things that are short of having to in fact have rule changes
6 or even statutory change in order to make -- because if
7 that's where we are, then I think we are in tough shape.

8 And the second question about what kind of
9 commitments make sense from us and what kind of commitments
10 make sense from the industry, that question is spurred by
11 the following two linked issues, and that is:

12 Does risk-informed purely mean burden relief, or
13 are we willing to let the chips fall where they may in terms
14 of focusing where the risk significance is greatest. And
15 the second, because I know that there's been some
16 skittishness about using certain quantitative assessment
17 methods -- and I think risk-informed means we are not going
18 to use them strictly and alone, but there's been some
19 skittishness because there's a feeling that the state of the
20 art has not advanced far enough with respect to, say,
21 probabilistic risk assessment, Mr. Ray's robust use of it in
22 managing his facility notwithstanding.

23 So a question which my colleague, Commissioner
24 Diaz, in fact has raised in the past, and that is what kind
25 of commitment to PRA quality or certification is the

1 industry willing to make, but concomitant with that, what
2 does that mean in terms of what we think is necessary and
3 how do you get to some place that makes sense.

4 So that's why those questions occur to me, and
5 that is have we all availed ourselves, whether we are
6 talking about the NRC or the industry, of the opportunities
7 for change, short of massive or new programs, if there
8 already is a question of pushing to completion some of what
9 already has been underway.

10 And then what kind of commitments are necessary or
11 make sense, from us, and from the industry, the ones that
12 have to match in order for us to move ahead?

13 So with that statement, I was thinking, why don't
14 we begin with discussing risk-informed, performance-based
15 regulations and regulatory processes. We all know that the
16 early regulations were prescriptive, they were established
17 on a deterministic basis, they had conservatisms built in,
18 some in the light of current day being perhaps too
19 conservative. We have the defense-in-depth philosophy which
20 is a cornerstone of the way the industry grew and the way we
21 regulate in this country, but the Commission, at least in
22 theory, has made a commitment to incorporate the use of risk
23 insights as much as it can and as broadly as it can in its
24 regulatory processes. At the same time, there does seem to
25 be some differences of opinion vis-a-vis performance-based

1 regulation, both what it means and how much sense it makes
2 for the industry today. Does it merely mean a results
3 focus, or does it mean some more involved requirements or
4 set of activities? And I think we need to try to come out
5 somewhere.

6 And so I am going to begin by asking Mr. Ray, who
7 talked about managing his facility, and then ask Joe Colvin,
8 if he would, to start us off with that. But as we talk
9 about issues, I am interested in solutions, and I think if
10 we could do that.

11 MR. RAY: Thank you, Chairman Jackson, and I will
12 try and keep it brief. There were a lot of things there to
13 possibly invite comment, and I will try and keep on a narrow
14 track.

15 Although I think I did use risk in my comments, I
16 tried to avoid the tension that Commissioner Diaz raised by
17 talking about an objective basis for allocating resources.

18 I think Sam Collins' point was one I'd like to tee
19 off from, and that is do we have the resources -- you used
20 the word massive, Commissioner Diaz talked about it being
21 resource-intensive work -- to change the basis upon which we
22 regulate. But Sam mentioned how he had been out in the
23 field, and was now here in the headquarters office, and I
24 happen to be acquainted with quite a lot of people, as long
25 as I've been around, who have made that same change.

1 I would say the agency does have the resources
2 necessary to undertake the kind of change that can only be
3 produced by rigorous, objective methodologies, risk-informed
4 being the way that we describe it.

5 It isn't a trivial thing. I had the experience of going
6 down and getting all my chief nuclear officer -- colleagues
7 together in Florida a couple of years ago to get a
8 commitment to the industry's substantial effort to require
9 -- to produce that.

10 I think in times past, you and I have talked about
11 a paper that we produced, got endorsed by everybody raising
12 their hand and supporting it, and in that paper, it speaks
13 to this issue of the substantial commitment that would be
14 required by the industry in order to undertake this task.

15 After that, though -- and this goes to the
16 comments I made about the perfection being the enemy of the
17 good. We got an indication of what, simply put, I'd say is
18 we'd have to relicense every plant in the country to
19 incorporate a PRA model that met a very rigorous set of
20 standards.

21 And I understand why the staff comes out at that
22 point. That is a natural result of asking, "What are the
23 requirements that should apply if you are going to use risk
24 in regulation of these plants."

25 Well, the answer is going to be that is probably

1 impractical.

2 I'll conclude by simply saying, Jim Jackson, I
3 believe -- I'm convinced the high capability that this
4 Commission has to deal with that tension, that balance
5 between what is an acceptable model upon which to base a
6 risk informed regulation.

7 The guidance can be provided to the staff that
8 will overcome this dilemma that we face today. It also
9 manifests itself, as I said, in when people bring forward an
10 initiative, a very narrow initiative on ISI or diesel
11 testing or whatever. It runs into this same phenomenon.

12 And, again, I don't mean to sound critical of the
13 staff. I understand how the staff operates. Even many
14 years, I was part of the staff.

15 So I think that the solution lies largely in the
16 policies that are within your ability to adopt. The
17 industry has pledged to support that. It will take
18 resources that I think exist today, but will have to be
19 redirected to do that, and it will take a consistent
20 position being maintained by the Commission for a
21 considerable period to get it done.

22 It's not an easy task, and I don't mean to suggest
23 that it is. It does have to be sailor proof, as Joe said.
24 I think it can be made so. And if I say anything more, I'm
25 going to get down into too much detail, so I'll just -- I'll

1 stop right there, which is giving you my conviction that it
2 can be done. The resources exist in the agency. The
3 industry has committed itself to do it, and it -- it is
4 possible, I think, for us to make that -- reaffirm that
5 commitment here now, and go forward on that basis.

6 CHAIRMAN JACKSON: Well, let me ask you a
7 question. I mean the Commission has a PRA implementation
8 plan, and there were the various industry pilots, braided,
9 QA, tech spec'd changes, ISI, IST. And then the regulatory
10 guidance documents that have come out.

11 Are any of the initiatives that the Commission
12 currently has underway or had underway moving down a line to
13 help us in this regard, or is it a question that it's not an
14 -- that it needs to be accelerated, or there are different
15 things that need to be done?

16 I mean this is what I'm interested in trying to
17 get some understanding of.

18 MR. RAY: The plan, I believe, is appropriate and
19 will achieve success. It is going to take involvement by
20 the Commission. It is going to make -- it is going to
21 require you all to make the kind of decision I referred to
22 when I said, "Look, 10 CFR 5059 does not mean there can be
23 zero increase in risk."

24 Only you could make that decision. Nobody else
25 here in this agency could make that decision.

1 You've made it. I applaud you for it. It is
2 self-revealing what "minimal" means. I understand that.
3 But the important thing was that you said it isn't zero.

4 And you're going to have to be engaged in this
5 process, too, the structure and outline of it is, as you
6 say, before you. It's been adopted, and I think it can be
7 successful, but it will not happen by itself.

8 Frankly, having participated in code writing
9 groups and so on in the years past, as Colvin mentioned, we
10 built these plants. We put them into operation in a
11 different era, but it was an era in which the agency and the
12 industry worked together to produce standards that were
13 acceptable to both parties.

14 I think that is needed here. This current process
15 is less than efficient that we have, because I don't think
16 it produces enough engagement on operational issues that are
17 the drivers of what should be our focus, and, again, I don't
18 want to monopolize the time.

19 CHAIRMAN JACKSON: Well, I'm going to help you to
20 monopolize it before I get to Mr. Colvin.

21 When you say the current processes are not
22 efficient, what do you mean by that?

23 I mean what needs to change?

24 MR. RAY: I don't think that we have the kind of
25 engagement between the industry and the staff that we've had

1 in the past.

2 We do not have a code-writing group, for example,
3 that would produce a deliverable product that addresses this
4 issue. What we have is an exchange of positions back and
5 forth. And it is very -- each of us tends to react to the
6 other. We don't work together to produce something that is
7 acceptable and then stands the scrutiny of public
8 examination, as, for example, the SME code does.

9 CHAIRMAN JACKSON: Joe, do you have any comments
10 you want to make on this?

11 COMMISSIONER DIAZ: I do.

12 CHAIRMAN JACKSON: Let me just --

13 MR. CALLAN: I'll defer to Commissioner Diaz.

14 CHAIRMAN JACKSON: No. I'm not going to let him
15 off the hook.

16 MR. CALLAN: I think Harold's point about the fact
17 that we -- there's too much posturing going on, and we see
18 it -- we've seen it recently in the 10 CFR 59 arena, our
19 quest for arriving at an improved assessment process.

20 But I think it's improving. I think recently in
21 the last several months, I think we've developed a better
22 relationship with industry groups such as NEI and it's
23 improving, but it hasn't been a good record. I admit that.

24 I'm not -- I don't go back far enough to remember
25 co-groups, so I can't address that. That's before my time.

1 MR. RAY: That's the price I pay, I guess.

2 MR. CALLAN: That's right.

3 MR. MCNEILL: I think you need to put these in
4 perspective, and I think maybe the PRA is a good example.

5 I'm not a historian of this, but my recollection
6 is that somewhere in the late eighties or very early
7 nineties, we began to discuss -- and when I say, "we," it
8 was the collective industry including the regulator.

9 And some pilots came out. Pretty soon, everybody
10 had to produce one. There was an issue around submitting
11 them for review and your analysis and where there were any
12 specific risks within your plant.

13 And out of that became a better understanding of
14 some of the value and use of a PRA that went beyond its
15 original intent, which I -- when it was prescribed, it was
16 around are there any unidentified specific risks on a
17 plant-by-plant basis.

18 And I think we were -- because of the nature of
19 the development of the models, there were differences of
20 opinion, not only on how to do it, but to what level of
21 detail it needed to be done.

22 And that, in a historical perspective, is probably
23 not bad because you were able to get a synergism of the
24 different viewpoints that may have now arrived at a better
25 basis for determining what you want on an ongoing basis, you

1 know, in terms of model detail and things of that nature,
2 than you would have gotten if somebody had sat down and
3 said, "Right here from the start, here is what I want,"
4 because this was really untested methodology."

5 Well, we now have come to the point where my sense
6 is that we have enough data to provide in more detail
7 explicit framework.

8 What challenges does that present? Well, maybe
9 there are some people that have not done it in that manner.
10 It's going to cost them money to go back and redo it, as an
11 example.

12 And I think that history provides a real
13 justification for potentially looking at what Commissioner
14 McGaffigan, in his remarks, stated because I can give you
15 examples of barrier analysis, the cultural issues that
16 reflect some plants, and I think that Joe Callan has pointed
17 out what I think is a very important issue for the NRC.

18 Just as our histories in the utilities business
19 came out of the original design construction operation,
20 married to some extent with the Navy background that many of
21 us have, the NRC has developed a culture of its own.

22 And if you're going to make a dramatic change, one
23 of the things that we have found is that you cannot do that
24 without an emphasis on cultural change, which is a somewhat
25 different activity than just rewriting regulations and

1 things of that nature.

2 I mean there -- and if you don't do that, you end
3 up with organizational dichotomy that really is conflicting,
4 as you go forward.

5 And the point that I was trying to -- we now have
6 40 years of experience. The industry is on the verge of a
7 different change.

8 Is it not time to sit back on a broader scale,
9 work on a long-term basis to, in fact, restructure the way
10 we regulate the industry?

11 And it's not a short -- it's not something you can
12 do in a year or two. And it's something that has to be
13 adapted.

14 I would offer to you that if I'm correct, and I
15 think Harold shares this view and there are many others that
16 share the view on consolidation -- that, in fact, it will be
17 easier.

18 Part of the problem -- I don't want to -- a lot of
19 the problem is the fact that diversity of the ownership
20 interest across the industry makes it difficult for us to
21 commit to collectively. And as you reduce the number of
22 operators of plants, you are going to have stronger
23 commitments from fewer people.

24 You are also going to run, I think, into more
25 challenges around smaller items. In other words, the NRC

1 can take advantage of our inability to come to a collective
2 viewpoint within the industry on something, and you may find
3 yourself in court someday because three of us have gotten
4 together and said, "Hey, this is inappropriate for you and
5 we -- three of us can get together pretty quickly and have a
6 lot of economic power to go and do things.

7 Now I don't say that in a threatening manner. I
8 think that's a reality of a smaller or consolidated industry
9 as we go forward.

10 CHAIRMAN JACKSON: Okay. Commissioner Diaz?

11 COMMISSIONER DIAZ: Yeah. I'd like to go back to
12 the focus of your initial thing, which is -- was risk
13 information and the zero factor. And let me see if I can,
14 you know, put them together.

15 The zero factor in 5059 is just an indication of a
16 larger zero factor that exists in this agency, and that zero
17 factor is reflected in many ways that we operate it -- and,
18 you know, especially when somebody tries to conserve and
19 preserve not only the status quo, but preserve the design
20 basis or preserve something. And many of those things are
21 legalistic in nature.

22 And this agency need to be a technical legal
23 agency. It cannot be purely legalistic.
24 The risk information goes at the heart of the zero factor.

25 If we have risk informed regulation, truly and

1 completely, the zero factor disappears because this has no
2 longer reason to exist.

3 And that is the reason that I have advocated and
4 will continue to advocate risk information. It is not
5 because it's just a tool or because it gives you a meter.
6 It's because it goes at the heart of the question.

7 We really cannot accept a zero factor or zero
8 change or zero deviation. What we should access is actively
9 managed risk by the utilities and actively managed risk by
10 the agency. And that can only be done when we start with
11 risk informed regulation.

12 CHAIRMAN JACKSON: I want to get to Joe. I know,
13 Dr. Remick, you wanted to speak, but I think, Joe, yours is
14 probably a longer, and I'm assuming yours is a shorter
15 remark. And if I'm wrong, I'll have to switch you over.

16 MR. RAY: Okay.

17 CHAIRMAN JACKSON: Let me let you make a quick
18 remark.

19 MR. RAY: Okay.

20 CHAIRMAN JACKSON: And then I'm going to give the
21 floor --

22 MR. RAY: I want to go to your point about --

23 CHAIRMAN JACKSON: -- to Joe.

24 MR. RAY: -- risk informed, and what kind of a
25 commitment from the NRC and what kind of a commitment from

1 the industry.

2 Back in a different forum, not too long ago, I was
3 asked the question, "Could Part 50 be made risk informed?"
4 And I said, yes, I thought it could but I was not smart
5 enough to know how to do it as a whole.

6 But I spoke very positively about the commitments
7 that industry has made on a number of pilots, and you
8 mentioned some of them, QA, grade QA, IST, ISI, some of the
9 ones on hydrogen recombiners, the diesel start and load time
10 and so forth. I thought this was the way to do it.

11 You take some specific things, and the industry
12 has made tremendous commitment of resources to look into
13 these. How could you use things like safety goals and PRA's
14 and come up with an answer.

15 Give some insight, risk insight, based on the
16 PRA's and so forth, on regulations that might be changed.

17 But what I have not seen -- these things -- these
18 are some of the examples of decisions languaging, in
19 general, that I addressed where continuous request for
20 information.

21 And I use as a precedent, back when I was on ACRS,
22 there was a program called, "SEP, and I forget if that was
23 Safety Evaluation Program or systematic evaluation of a
24 program, but it was a question of do the early plants meet
25 the intent of current regulations which had changed

1 dramatically.

2 And there was a case where that project, from the
3 perspective of an ACRS member, I thought was very well
4 managed by somebody who took the ball, made very, very
5 difficult decisions, and you did not have these layers and
6 layers and layers of concurrence, and people questioning an
7 indecision on coming to some kind of decision. Some of the
8 decisions maybe not have been exactly correct, but decisions
9 were made.

10 And I think what the Commission needs -- I don't
11 see the Commission -- and I'm going to speak of the Agency
12 -- is taking full advantage of the insights of those various
13 pilot programs are going out and making the best of it, and
14 seeing how one might approach Part 50 and making it more
15 risk informed, a bite --

16 MR. MCNEILL: What's your best --

17 MR. RAY: -- a bite at a time.

18 MR. MCNEILL: -- successful, and how do we emulate
19 that success?

20 MR. RAY: Okay.

21 CHAIRMAN JACKSON: Thank you.

22 MR. RAY: You're welcome.

23 CHAIRMAN JACKSON: Joe?

24 MR. COLVIN: Chairman, thank you.

25 I'd like to -- I'd like to digress for one second

1 just to make a point, and I promise I will come right back
2 to --

3 CHAIRMAN JACKSON: That's all right.

4 MR. COLVIN: -- risk informed.

5 CHAIRMAN JACKSON: You can talk now because we
6 took all your time.

7 MR. COLVIN: Oh, thank you.

8 I think that we need to -- as we go through this
9 dialogue, we need to think about the concept of the old
10 cliché of not throwing out the baby with the bath water.
11 And I think that if we -- and I'll make a couple of points,
12 and I'll get back to your real question.

13 I think there are some steps that we need to take
14 and can be taken fairly immediately and without changes to
15 regulation requirements that are characterized under
16 enhancing the credibility of the regulatory process. And I
17 think we need to go back to the -- to some of the basics in
18 that, and I'll just pick up on Forest Remick's comments
19 about confirmatory action, one of those things.

20 I think that if you look at a rigorous application
21 of what is currently required under the context of rules,
22 requirements, law, tech specs, licensing. It's the things
23 that are binding on a licensee, and then look at the other
24 things that the -- the products or vehicles the agency uses
25 to manage, cajole, arm twist the license to do things,

1 confirmatory action letters, generic letters, bulletins,
2 confirmatory orders. You go down that whole list which are
3 not a -- do not have a legal basis in the context of the
4 regulations.

5 And a rigorous application of those by the staff
6 and by the industry would, in fact, be a very positive step.
7 I think the rigorous application of the backfit rule, or
8 certainly the consideration of what you are trying to
9 achieve, vis-a-vis that, in all the decisionmaking, if, in
10 fact, that was the goal, the threshold that the staff or the
11 department or division or whomever, would look at, I think
12 we would -- we would enhance the credibility and we would
13 raise the level up to things which are really important to
14 safety and not in the grass. And I think that -- that would
15 focus our resources.

16 I think that we're -- and I have some other
17 examples, but I'd like to go back to your question.

18 I think in a sense, we have an excellent example
19 of how to proceed in the context of risk informed
20 performance based regulation. There's been a lot of work
21 done, and that is clearly the maintenance rule.

22 Now we don't have a clear understanding between
23 the Agency, the industry, the staff, the plant maintenance
24 superintendents of what we mean by that, and I think the
25 first step in that process would be to come to some common

1 agreement at a very high level of what we mean collectively.

2 I think the second step in that would be then to
3 look at --

4 CHAIRMAN JACKSON: Excuse me. When you say,
5 "common," you mean common agreement rate with respect to the
6 implementation of --

7 MR. COLVIN: What is it that we expect of the
8 maintenance rule.

9 We have a maintenance rule that has a risk
10 informed section. I mean basically we go through and
11 through a process that uses the best tools that we have
12 available, whether that's PRA, PSA, expert groups or other
13 issues, to define what are the system structures and
14 components that are important to safety and that we need to
15 manage, and we need to place more attention.

16 And we have a process in that that tells you how
17 to deal with those, how to identify them, how to monitor
18 them, how to set goals and reliability and availability. We
19 have all that in progress, okay. And we have a vehicle by
20 which to do that.

21 And we then look at the performance of those
22 systems.

23 I think we need to define the risk side. I mean I
24 agree with Commissioner Diaz and the other comments that
25 you've made. Risk and performance based are not the same

1 thing, and we need to have a clear understanding of what
2 they are.

3 But then we have to have an expectation of what in
4 -- what is the end state or the desired result. And I would
5 submit we do not have that within -- there is -- within the
6 expectation of the inspector or the expectation of the
7 maintenance superintendent, or perhaps all of us.

8 I think that -- so I would submit, we need to come
9 to grips with what are we trying to achieve through that
10 process?

11 MR. MCNEILL: The practicality of that is that we
12 are still in the inspection of the implementation. We are
13 not yet reviewing the outcome.

14 MR. COLVIN: That's exactly right. We're not
15 looking at the --

16 MR. MCNEILL: Nobody is --

17 MR. COLVIN: -- outcome of performance --

18 MR. MCNEILL: Nobody has year -- although the
19 plant's monitoring their own performance through this to
20 find what is acceptable or unacceptable.

21 CHAIRMAN JACKSON: Okay.

22 MR. COLVIN: And I would just say that the next
23 step in that process, I think, is to then take and look at
24 that maintenance rule and the process and the output and
25 decide what is currently being done as required by other

1 regulations and other regulatory positions that are now
2 unnecessary and not required because we have this as our
3 product.

4 And I think that just -- one last comment.

5 We have spent many years in these issues. It's
6 taken four years. We're still working on reg guides and
7 ISI, IST and graded QA.

8 CHAIRMAN JACKSON: I thought those were
9 promulgated?

10 MR. COLVIN: Well, it's taken four years to get
11 those. We got a -- we've got a situation where we've tried
12 to have a pilot project on a whole plant risk, and we're
13 really wrapped around the axle of one example which was made
14 by somebody many years ago that we would do post-axial and
15 hydrogen sampling, and 30 minutes after true.

16 We'd like to make it 90 minutes. We can't get
17 beyond that simple example to really figure out how to make
18 this work.

19 And I think the reason goes back to setting the
20 goals that the Commission needs to set, putting the proper
21 people in a room and letting them go figure it out with a
22 common goal and objective. They have a common end point.
23 And I think that's what been missing.

24 We get the staff positioning, as Harold points out
25 back and forth. I think we need to take advantage of

1 figuring out a new way to bring the resources together.

2 CHAIRMAN JACKSON: Mr. Lochbaum.

3 MR. LOCHBAUM: Yeah. I just have a brief comment
4 on risk informed regulation.

5 To paraphrase Jack Nicholson, risk informed
6 regulation, we don't even know what risk is. And as an
7 example, I'd cite a report that was submitted this week by
8 the owner of Big Rock Point who informed the NRC that they
9 discovered that the pipe -- the discharge pipe from their
10 sodium pentaborate had a boring tank that was severed.

11 CHAIRMAN JACKSON: Thirteen years. Right.

12 MR. LOCHBAUM: One-third of that plant's life,
13 that safety function would not have been performed.

14 I haven't been to the PDR yet, but I'm sure that
15 that plant's IPE does not show the reliability of that
16 safety function to be zero, if that's what the reality was.

17 And that's not the only example. Jim Riccio has
18 been collecting outside design basin reports for the last
19 two years. I don't think that stack is a couple of inches
20 tall right now.

21 Not all of those rendered the safety system
22 inoperable, but a disturbingly high number of them did, yet
23 the IPE's for these plants show that these systems are
24 highly reliable, but that's not reality.

25 We need to narrow the gap between what the IPE's

1 say and what reality is before we can do any real risk
2 informed regulation.

3 MR. RAY: May I respond to Mr. Lochbaum?

4 CHAIRMAN JACKSON: Yes.

5 MR. RAY: I guess my only point in the example you
6 cited, which I know nothing about it, other than what you
7 said, would be, notwithstanding that, the IPE, given the
8 right direction, could have sent people to look at that
9 important and critical component in terms of verifying its
10 integrity, rather than dissipating the resources of both the
11 licensee and the agency in the areas that were not as
12 important as that obviously was.

13 So there is a benefit, notwithstanding this
14 experience, and, in fact, perhaps it tends to underscore the
15 importance of knowing what's important so you can then focus
16 your attention on it.

17 MR. LOCHBAUM: May I respond to that?

18 I think I --

19 CHAIRMAN JACKSON: Would you pull the microphone
20 down? Thanks.

21 MR. LOCHBAUM: I think PRA's -- avenues to
22 prioritize work that needs to be done at plants, and I've
23 seen that done at a number of plants very successfully.

24 You need to focus attention on the more
25 significant items. So I would agree wholeheartedly with

1 that. I've seen it done and it works very well.

2 But at the same time, when there are misses -- and
3 these are misses -- we have to recognize that that is
4 reality and factor that into what we're doing before we can
5 proceed, and just because we have a mathematically correct
6 model, that's not the whole complete picture.

7 CHAIRMAN JACKSON: Yes?

8 COMMISSIONER MCGAFFIGAN: I'd just follow up on
9 this interchange.

10 How did -- if we had a risk informed regulatory
11 framework as opposed to a deterministic regulatory
12 framework, how -- that's what we had at Big Rock Point and
13 it didn't catch it, either.

14 So I think what Mr. Ray is saying is that you'd
15 have a higher probability of catching the problem you're
16 describing, which I know nothing more about than what you
17 said either, but if you had a -- a more risk informed
18 framework.

19 We had a framework. The licensee didn't catch it,
20 obviously, our staff didn't catch it, and so the question
21 for the Commissioner is, which framework should I be working
22 toward?

23 Should I be -- just because there are misses, does
24 that mean the risk informed framework is not worth working
25 toward?

1 MR. LOCHBAUM: No. I think you can use risk
2 informed regulation or risk results to figure out which
3 systems you need to focus your attention on, but those have
4 already been done for these plants, and they're still
5 finding problems in those high-risk systems.

6 So how are we to determine what those high-risk
7 systems are. We haven't solved the problem. That system
8 was tested in the last 13 years, and it passed every test
9 apparently.

10 So why -- we knew that was a high-risk system at
11 that plant. We tested it frequently. We didn't catch it,
12 so I don't know what could have been done differently. But
13 that isn't the way to do it.

14 CHAIRMAN JACKSON: Joe, do you have a comment?

15 MR. CALLAN: Well, I know more about that episode
16 than what he said, and -- but I agree with everything he
17 said regarding the episode. We just -- I just briefed the
18 Chairman on it a couple of days ago.

19 But I agree with Commissioner McGaffigan's point
20 and I guess Harold Ray's point that a risk informed approach
21 would increase our -- increase the probability that either
22 or both the licensee or the NRC would focus on that system
23 and do the necessary verifications to identify the problem.

24 MR. CALLAN: I think what you are talking about,
25 Dave, is perhaps over-reliance on IPE to base a regulatory

1 judgment -- in other words, to modify that system for
2 example or modify another mitigative system because you have
3 such a high confidence in the functioning of that system.
4 That is slightly a different situation than what we are
5 talking about, which is to use risk to focus and allocate
6 resources.

7 CHAIRMAN JACKSON: Well, actually, I have a
8 question that follows on from what you just said, Joe, and
9 what Commissioner McGaffigan just asked.

10 That is, if the system is as risk-significant as,
11 you know, you have told me it is, how did it get missed and
12 what does that say about how risk-informed, how much of a
13 risk-informed inspectable population we have at the plants
14 or that we have our inspection -- I don't want to get into
15 inspection yet per se, but in terms of Commissioner
16 McGaffigan's question about would risk-informed regulation
17 have helped us at least to identify that this was a system
18 that warranted a deeper look than apparently it got -- what
19 do you have to say about that?

20 MR. CALLAN: We are doing a lessons learned,
21 obviously, because at least superficially our reaction is
22 that our inspection procedures, which are moderately
23 risk-informed, should have directed inspection resources at
24 some periodicity to walk down that system.

25 MR. COLLINS: It's an internal line.

1 MR. CALLAN: What?

2 MR. COLLINS: It's an internal line.

3 MR. McNEILL: Can I? Let me offer just a little
4 differing view on this.

5 CHAIRMAN JACKSON: Wait -- I missed that
6 interchange. Excuse me.

7 MR. COLLINS: I believe that line is an internal
8 line that is not inspectable unless you get inside the tank
9 and that was not done routinely in order to observe that
10 particular break.

11 CHAIRMAN JACKSON: Okay.

12 MR. COLLINS: So it is a little less applicable
13 perhaps to routine licensing inspection or NRC oversight,
14 but clearly there are lessons learned for hidden issues.

15 CHAIRMAN JACKSON: Okay, thank you.

16 MR. McNEILL: And my point is that I am not so
17 sure that inspection is the appropriate -- it may in fact be
18 testing and demonstrable results from testing. One of the
19 lessons we have learned in the Navy is that there are --
20 there were many things that if tested once may not be
21 observable over an extended period of time and you had to go
22 back periodically and revalidate the system operation by
23 test, demonstrable test, with proven results because you
24 didn't have the kind of visual monitoring that apparently is
25 not available in this particular circumstance.

1 CHAIRMAN JACKSON: Well, it strikes me that there
2 are two things that can be said.

3 One is I agree with whoever made the comment -- I
4 think there are two pieces to it. One has to do with what a
5 risk-informed approach directs you to pay attention to and
6 the other is if you are making specific judgments based on
7 whatever assessment methodology presumes a certain status of
8 something in the plant, does that something in the plant in
9 fact have the status that that judgment is based on, and so
10 those are two separate issues, but in fact this -- Corbin,
11 your point brings me to one of my earlier questions, which
12 is what does risk-informed really mean in the sense that
13 somehow -- you know, whatever the lessons learned will be,
14 in the end the bottom line is that the licensee wasn't aware
15 of this severing of this line for 13 years, nor were we, so
16 the question becomes if -- theoretically if out of some IPE
17 or PRA analysis or some other kind of way of doing a risk
18 assessment one had indicated that this was a very critical
19 line in the plant which required some periodic going in and
20 looking at it, which might not have been built into how the
21 licensee did its business if it wasn't something that was
22 easily observable in the normal course of events, that by
23 definition implies perhaps some additional effort, some
24 additional resource commitment.

25 That is why I raised the issue about what does

1 risk-informed mean? Does it mean that the chips fall down
2 on both sides -- as opposed to taking away attention from
3 what is trivial, it can also mean that if something is
4 deemed by a risk assessment to be more important than you
5 thought it was, or very important, that then you may have to
6 take some extra steps -- which means resources.

7 MR. McNEILL: In this case --

8 CHAIRMAN JACKSON: To go in and do something about
9 it.

10 MR. McNEILL: In this case, you know, a four-year
11 internal inspection or a --

12 CHAIRMAN JACKSON: Whatever, right --

13 MR. McNEILL: -- four-year flow test may be the
14 appropriate thing that has to be done --

15 CHAIRMAN JACKSON: Right --

16 MR. McNEILL: -- on that kind of a system.

17 MR. RAY: I just, I want to raise an objection
18 whenever we are talking about it is going to take more.

19 I don't think it takes more.

20 CHAIRMAN JACKSON: Okay.

21 MR. McNEILL: Collectively more.

22 MR. RAY: I think it's better prioritization is
23 the way I like to think about it --

24 CHAIRMAN JACKSON: Sure.

25 MR. RAY: -- we can choose our own models but that

1 is --

2 CHAIRMAN JACKSON: Well, I agree. I mean but all
3 I mean when I say the chips fall down both ways is by
4 definition you prioritize some things are going to come off
5 the bottom, so to speak, but there could be things that are
6 up at the top that heretofore we have not had before.

7 MR. McNEILL: And I don't think the industry has
8 ever or let me say I think the industry has understood that,
9 that is, as Harold would say, it's a reallocation of
10 priority, and I think that our instinct tells us that
11 collectively all of those activities may in fact reduce --

12 CHAIRMAN JACKSON: -- the burden.

13 MR. McNEILL: -- the burden.

14 CHAIRMAN JACKSON: Right. I could probably agree
15 with that. I certainly think that certain things have to
16 fall off the table and other things go on.

17 MR. COLLINS: Chairman Jackson?

18 CHAIRMAN JACKSON: I'm sorry. Sam wanted to say
19 something. Thank you.

20 MR. McNEILL: Thank you.

21 MR. COLLINS: I wanted to address perhaps an
22 overarching issue and although we are talking specifically
23 about risk-informed and performance based has been mentioned
24 as a part of that two brief comments.

25 One is we're complete -- the maintenance rule

1 application inspections -- in fact, Limerick, Corbin, I
2 think was the last plant I think --

3 MR. McNEILL: Right,

4 MR. COLLINS: -- and the routine maintenance
5 inspections have been modified to include what we now hope
6 to be a performance-based measurement of the maintenance
7 rule, but it is very difficult.

8 The Commission asked the question of the staff,
9 how do you know this rule is working? And that took a lot
10 of thought and we yet don't have an answer.

11 [Laughter.]

12 MR. McNEILL: So the effort is not over yet?

13 MR. COLLINS: No, we are still -- although we're
14 giving it a lot of good thought. The effort is still yet to
15 play out over time of how to measure performance-based
16 implementation over a spectrum of facilities over a spectrum
17 of time, but our inspection has been modified to give us
18 that data and we hope to achieve that result and provide the
19 feedback but it is an example of how difficult in fact
20 performance based --

21 MR. McNEILL: Particularly if you are going to
22 use -- I mean if the ultimate says -- I mean there is a
23 tendency, an organizational tendency -- the Commissioner
24 says risk is never zero in this business but a Commissioner
25 can say that the risk will be zero of a major accident

1 during my tenure, all right, because the timeframe is so
2 short, so you have to understand that this is not a riskless
3 business.

4 Almost any activities in human society are not
5 riskless so there is a fine balance to understand the
6 distribution of that risk with time.

7 CHAIRMAN JACKSON: Absolutely.

8 MR. COLLINS: My second point, and this is the
9 overarching aspect, would be much of what we are talking
10 about I believe the Staff is very receptive to, and that is
11 engagement, certainly the guidelines and the Commission's
12 role in providing those guidelines and reinforcing the
13 bounds of that decision-making process is important but it
14 gets down to providing the forum for the Staff, and I am
15 here as pretty much the implementor of the programs and to
16 provide the Staff the tools to get to where we want to go as
17 a broader based body.

18 We are really looking at what process barriers
19 currently exist to prevent the type of dialogue that we are
20 referring to from occurring. Many of those are historical.
21 We have mentioned the zero change aspect, but in fact many
22 of those are embodied in our process and our regulations and
23 interpretation of those regulations as to how much can be
24 done in a forum like this, only if you can envision the
25 working level around this table to get to the goal that we

1 need to get to.

2 Those are process issues which I believe we need
3 to look at internally and provide the forum for these types
4 of dialogues --

5 And type of end results to be formulated. So they
6 can be raised up in a shorter time frame in a more
7 consolidated sense to provide for some of the issues being
8 resolved. Without that type of change internally to
9 processes and to facilitate the results, we are not going to
10 get to where we need to go.

11 CHAIRMAN JACKSON: I agree.

12 MR. COLLINS: I think that is a significant
13 challenge for us.

14 CHAIRMAN JACKSON: Also, I think one thing that
15 relates to your over-arching comment that I would like to
16 extract because it ties to back to, I think, where Joe
17 Colvin started, and that is this issue of -- you mentioned
18 the maintenance rule and you are right, the Commission has
19 asked you, how do you know that the rule is accomplishing --

20 MR. COLLINS: I just wanted you to know I hadn't
21 forgotten the questions.

22 CHAIRMAN JACKSON: Good. And that is the issue of
23 having the objectives clear from the beginning, and the
24 implementation of the rule being oriented to those
25 objectives. And it is something that the agency has been

1 struggling with. But it is a fundamental issue and
2 something fundamental that has to occur.

3 But now back to Joe.

4 MR. COLVIN: Well, I was just going to pick up on
5 Sam's comment. I think that the process issues are very
6 important and we need to work through those to establish the
7 framework. And I think the Commission, certainly, in my
8 view, has the ability to establish the proper framework to
9 allow this -- I will use the term "partnership" between the
10 appropriate stakeholders to work through these issues. And
11 it needs to be there, I think, with an equal, if that is
12 possible, an equal commitment to what the desired end-point
13 and end-state is.

14 And I will just share with you, the maintenance
15 rule guideline development is an excellent example of that.
16 And we used a process by which we had a senior policy level
17 group from the industry and one from the NRC staff. We had
18 a common end-goal, which was develop a guideline that fit
19 within the context of the rule, and improve maintenance, and
20 we had that commitment on both sides, and we had the
21 interactive engagement of the Commission, and, in
22 particular, one Commissioner leading that interface. I
23 think the result of that was very positive.

24 Now, we tried that same process, I will tell you,
25 on Graded QA, ISI, IST and a number of other issues, and

1 they -- I guess I would be blunt, say they failed miserably,
2 if you look at them in the context of the maintenance rule.
3 And it was in large part, I think, because of not having the
4 common objective, not having the commitment on both sides to
5 the end result of what was desired, and not having an open
6 dialogue of the issues.

7 We run against, up against, well, this is
8 pre-decisional or this is preliminary, or OGC prevents us
9 from this or that. I mean all kinds of barriers, which, in
10 fact, if you worked through those, could be worked -- they
11 could be eliminated. I think that's -- I really would urge
12 the Commission to look at those and take the steps to
13 establish that framework to have an open dialogue. And
14 whatever forum is the end result, I think we can work in
15 many different fora to get there.

16 CHAIRMAN JACKSON: Okay. I think we need to
17 probably draw this -- but everything weaves through
18 everything else, as we can see, but we need to move on, and
19 it just so happens that it is 11:30 and we need to have our
20 affirmation and give people the time to their phone calls
21 and stretch their legs.

22 But let me just quickly go around the table.
23 Since this the topical area of risk-informed regulations and
24 regulatory policies -- I mean we have talked a lot about the
25 maintenance rule, which is one that already exists, and then

1 the Commission has done some fine-tuning to it lately.

2 But are there other areas or other regulations, we
3 have talked about 50.59, but are there other targets of
4 opportunity where we think there would be greatest payoff
5 vis-a-vis risk-informed, development of risk-informed
6 regulations that anybody would like to speak to? And what I
7 am just going to do for that is to start to my right and go
8 around the table with Mr. Nye.

9 MR. NYE: Chairman, I think I will defer to some
10 of these others who have a closer focus on this.

11 CHAIRMAN JACKSON: Okay. Dr. Pate.

12 DR. PATE: The same.

13 CHAIRMAN JACKSON: Mr. Lochbaum?

14 MR. LOCHBAUM: No.

15 COMMISSIONER MCGAFFIGAN: I would like, I was
16 looking for a chance to talk, and I won't talk very long.
17 But I want to go back to Commissioner Remick, and maybe
18 since he will be soon following me in this order, challenge
19 or the -- I think I may have been the one who asked him how
20 do we get a risk-informed Part 50, and I have asked at the
21 Reg. Info Conference, how do we get a risk-informed Part 50?

22 And I don't know how to get there. I do think
23 some of these mechanisms that Joe has been talking about
24 might help. If that is a fundamental goal, to get to a
25 risk-informed Part 50, we could go through and we could look

1 at Part 50. Another former Commissioner has suggested to me
2 that, in light of the maintenance rule and its success,
3 should we look at Appendix B to Part 50 and pull some stuff
4 out?

5 The Commission, at that time, when they propounded
6 the maintenance rule, didn't feel that it was appropriate at
7 that point. But I know the industry view, as is sometimes
8 expressed, is that the maintenance rule is a layering on of
9 what is already there in the traditional prescriptive
10 framework.

11 So I don't know whether in risk-informing it is a
12 step by step process, where we take areas of opportunity,
13 such as Appendix B, or whether it is a massive, one-time
14 change. But I do think we need to think about it.

15 One of the diagrams that a licensee has shown to
16 me, and it is a licensee who presumably has one of the
17 better PRAs. They have looked at rules that have been
18 passed by the Commission going back to the post-TMI rules or
19 requirements, and they showed me a sort of step-down curve
20 of their core damage frequency and the various post-TMI
21 action items had almost no effect for this particular plant.
22 The station blackout rule had a large effect. Presumably,
23 they added a diesel, they did something, but it had, you
24 know, a really remarkable effect on their core damage
25 frequency.

1 And that is sort of a metric of whether rules are
2 worth doing or not is -- you know, if we could -- and which
3 rules are no longer worth having, if, when you pull them
4 off, there's microscopic or no effect.

5 And going to Dave's point, I think we have had a
6 lot of discussion at various meetings. I see the ACRS
7 there. I think everybody believes that deltas in core
8 damage -- or deltas in IPEs, deltas in core damage frequency
9 is a result of a specific change or have greater fidelity
10 than the IPE itself. I mean the Commission, if you had been
11 to any of our meetings, you would have seen all of us asking
12 the exact same questions -- Is this IPE number worth
13 anything? But I think the strong view of the ACRS, and
14 others who know more about this than I, is that the delta
15 means something.

16 So that is just a bunch of rambling thoughts. But
17 the challenge is -- we have been talking about it forever,
18 and how to, with some speed and with some common sense of
19 goal. The industry, one person walked up to me at the Reg.
20 Info Conference and said, Commissioner, we do have people
21 thinking about a risk-informed Part 50 and how to get there,
22 but there is not consensus as to whether we do it piecemeal
23 or whether we do it -- try to do it in one large action, and
24 there are pros and cons of both.

25 So I throw out those thoughts and I look forward

1 to the rest of the discussion.

2 CHAIRMAN JACKSON: Great. In fact, as we go
3 around, perhaps, you know, you can put your commentary in
4 that context, in terms of where there are opportunities in
5 terms of development of risk-informed regulations, this
6 piecemeal versus, you know, let's throw the whole thing out
7 and sit down and rewrite Part 50.

8 Joe.

9 MR. COLVIN: Chairman, I think there are probably
10 a lot of rules that we could look at individually and try to
11 make performance-based, risk-informed and so on. We have
12 tried those with diesel reliability. Containment leak rate
13 testing is an excellent example of taking that in. We do
14 have the work on Graded QA and how fits into Appendix B, I
15 think is a work in progress, as well as ISI, IST and how
16 that fits. So I think we ought to pursue those and go back
17 and also take my previous recommendation about the
18 maintenance rule and use that as the example before we walk,
19 before we run, so to speak. I think we will learn a lot
20 through that process.

21 I also think we need to go back to basics about
22 what is the ultimate goal and where is the threshold of
23 safety. It goes back to the point that Mr. McGaffigan just
24 made. We implemented a lot of changes based upon a lot of
25 good ideas that didn't have -- that had little impact in

1 improving safety.

2 And, yet, a rule like station blackout, where
3 there was a clear recognition that there was, in some cases,
4 a 90 percent impact on core damage frequency for some
5 plants, we really grabbed ahold of that as an industry and
6 the agency and dealt with it. And that rule is in place and
7 I think that rule, the rigor of that rule and the guideline
8 it has implemented has shown true, even through today, and,
9 in fact, that -- the example, the tornado hit at Davis
10 Bessey, I think, and the actions, and how that showed that
11 the rigor of that was in fact correct.

12 CHAIRMAN JACKSON: Okay. But the question I am
13 really trying to get at is whither to now.

14 MR. COLVIN: I understand that, but I am just --
15 let me just close on this point, because I know you are
16 trying to move on.

17 I think that we -- though, my point is we use a
18 lot of means currently such as calculations of averted
19 on-site costs, and other things, to justify a regulation and
20 the implementation of that regulation, that may in fact have
21 little, real true benefit of safety.

22 So we have got -- I think that we have got to take
23 the regulations. We have got to look at the risk-informed
24 information we have and at the same time decide where the
25 threshold is, otherwise, we will continue putting in place

1 regulations that are risk-informed and/or performance-based
2 but which do not contribute to safety.

3 CHAIRMAN JACKSON: Okay. So let me make sure I
4 understand what you are saying. You are saying if one looks
5 at the risk-informed information available, that what you
6 are really suggesting is that in promulgating or considering
7 the promulgation of any rule or rule change, one needs to
8 use that in a more rigorous and systematic way in
9 determining the basis for doing the rulemaking in the first
10 place.

11 MR. COLVIN: Yes. And have a clear expectation of
12 what safety benefit is in fact desired in order to make that
13 determination.

14 CHAIRMAN JACKSON: Okay. Mr. Ray.

15 MR. RAY: Chairman Jackson, it is 11:40. There is
16 much I would like to say in answer in your question. I will
17 limit myself to just two things. First, yes. Secondly, I
18 do --

19 [Laughter.]

20 CHAIRMAN JACKSON: What? You are going to give me
21 a million dollars?

22 MR. RAY: No. Yes, I think to the question you
23 asked, which I won't try and repeat back to you.

24 CHAIRMAN JACKSON: Sure.

25 MR. RAY: But in any event. The other thing I

1 would say to you and then I will quit for now, is we operate
2 our plant differently because of the safety monitor. We
3 don't just look at core damage frequency. We look at the
4 probability of boiling in the core. There are lots of
5 things that -- functions that it has. I think that they are
6 things that this agency cares about, just as I do, and we
7 can -- I am wandering. We can use this technology to
8 improve the results that we achieve in the way of safety.
9 There is no question about it. It shouldn't be a subject of
10 debate.

11 I know you are looking for what is the next thing
12 for us to do, and I will have to tell you -- I will have to
13 tell you after lunch or after we get back.

14 CHAIRMAN JACKSON: Thank you. Thank you.

15 MR. RAY: It's too long.

16 CHAIRMAN JACKSON: Okay. Thanks.

17 Sam.

18 MR. COLLINS: I just have a brief comment. Again,
19 that is having agreed with the intent of most if not all of
20 the discussion. My issue would be, How do we apply it? How
21 do we get it into the process by which we can achieve these
22 goals and then how do we, in fact provide the right types of
23 guidance, whether it be policy or implementation, to our
24 reviewers and to our inspectors, such that it manifests
25 itself in the right result?

1 I perceive it as a gap right now, even
2 philosophically, in the initiatives that have already been
3 taken, because the guidance and the training, although it is
4 in progress, has not really manifested itself in the desired
5 results.

6 Will it get there? I think so. Could we do it
7 quicker and faster? Probably so, given resource
8 constraints. But I would like to stay focused not only on
9 it philosophically, but bring it back into the practical
10 application aspect, because that's -- and only then we
11 achieve the results.

12 CHAIRMAN JACKSON: Okay. Thank you.

13 Joe?

14 MR. CALLAN: Well, I'll just say that I -- we are
15 talking about risk in the context of operating facilities.
16 But I think to really do the kinds of things we are talking
17 about, we as an agency have to be willing to accept more
18 risk in our processes. You can call it litigative risk or
19 however you want to define it. But our regulatory regime is
20 predicated on driving our risk to zero, and that leads to
21 complexity. And it gets back to the notion --

22 MR. McNEILL: And high costs.

23 MR. CALLAN: Yes, it gets back to the notion that,
24 and I agree with this whole-heartedly, that our quest for
25 perfection, and I'll paraphrase a little bit, perfection in

1 regulatory processes can be the enemy of adequacy or good
2 enough. And I think we have to be more willing as an agency
3 to accept good enough as an answer. And risk-informed, QA,
4 ISI, and I think our quest for perfection in those areas
5 killed it.

6 CHAIRMAN JACKSON: They aren't dead.

7 MR. CALLAN: Well, they are not dead. Thank you.

8 But we have to be able to say that is good enough.

9 CHAIRMAN JACKSON: Okay. Since people have talked
10 about the overly legalistic -- Karen, do you have any
11 comments you want to make?

12 MS. CYR: Well, I didn't interpret Joe's in that
13 case particularly. I mean, clearly, there are legal
14 framework issues that you have to work within, but I think
15 they provide you lots of flexibility and you have to be
16 willing to take the flexibility that is there and work with
17 it.

18 CHAIRMAN JACKSON: Okay. Corbin.

19 MR. McNEILL: I have one area here in this area
20 that I think is important, because it is an expansion of the
21 use of this issue. And it really gets down to the public.
22 The public's appreciation of the risk of nuclear is in some
23 way formed by NRC's public reactions to things, and it is
24 not clear to me that the public is not drawing an incorrect
25 view of risk because of the way that the NRC publicly

1 handles issues, whether it is enforcement or things of that
2 nature.

3 And by that I mean, and this goes back to Harold's
4 very early remarks about whether, in fact, notices of
5 violation on inconsequential --

6 CHAIRMAN JACKSON: We are going to come to that.

7 MR. McNEILL: Yes. Okay.

8 CHAIRMAN JACKSON: Right.

9 MR. McNEILL: But I think that that is an issue.
10 If the public presentation of NRC actions was more aligned
11 with the true risks, that, in fact, the industry would be
12 more acceptable to the general public.

13 CHAIRMAN JACKSON: Okay. Why don't we come back
14 to that point after the break?

15 Dr. Remick.

16 DR. REMICK: All right. Well, certainly, first, I
17 would endorse Commissioner McGaffigan's suggestion, Appendix
18 B being ripe for one to be looked at. Look at the number of
19 NOVs that are based on Appendix B on matters that, really,
20 many of which have very little, if any, safety significance.
21 Basically, Appendix B says you are going to establish
22 procedures and in the procedures it says you are going to
23 shave every morning, and you didn't shave this morning,
24 that's Level 4 and somebody has to respond to that.

25 Also, I would say complete the pilots that you

1 have underway. There are some significant pilots there.
2 They have drug on for a long time. You need to better
3 manage those projects. You need to set schedules for
4 completion. Already, there is reluctance, I am told, by
5 some licensees to submit the results of their analyses
6 because they don't expect anything is going to happen based
7 on some of the early ones. But I think those pilots can
8 help show the way for further changes to the regulations.
9 And I would say get them done.

10 CHAIRMAN JACKSON: Great. Thank you.

11 Commissioner.

12 COMMISSIONER DIAZ: I just want to take a year
13 leave of absence from the Commission and make Part 50
14 risk-informed.

15 [Laughter.]

16 CHAIRMAN JACKSON: Okay, I have Diaz, Part 50.

17 Okay. Well, my only comment is all of the above.
18 And I think the challenge is to go back and look at what is
19 already underway. Get to the basics, based on the
20 cornerstones of what our jobs are, and to have the staff
21 break away the barriers to working with our stakeholders and
22 to put the focus and attention to move these things along a
23 pace.

24 We will take a break till 12:05, and then what I
25 would like to do when we return is to have a combined

1 discussion of inspection, enforcement and assessments, since
2 they all go, and should go together, even if we don't think
3 they do as well. And then, finally, close with the
4 timeliness of NRC processes and then we will capture
5 whatever is left after that, and to try to see where we go
6 from here.

7 So I thank you for your indulgence. I know all of
8 you are very busy, but I do think this is an important
9 discussion. Thanks.

10 [Recess.]

11 CHAIRMAN JACKSON: Well, thank you very much.

12 As you know, fundamentals of NRC's mission of
13 protecting the public's health and safety is our need to
14 independently know that the licensees are meeting their
15 responsibilities for safe operation and a key part of it is
16 NRC's inspection program.

17 We also have additional parts to our oversight
18 assessment and enforcement. And other than my beginning a
19 long soliloquy, I think it's appropriate, given the
20 background that we have from this morning's discussion, just
21 to launch directly into comments from the various members of
22 our discussion at the table in these areas.

23 And so I'm going to again start right and then go
24 to the left and invite Mr. Nye to make any comments he
25 wishes to make in these three areas.

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1 MR. NYE: Thank you, Chairman. I won't offer
2 anything very profound in this respect, other than to say
3 that it does seem to me that perhaps we could all agree that
4 the increase in apparent violations is somewhat inconsistent
5 with what I believe we all perceive as an improved
6 performance on behalf of the industry. And so there is some
7 disconnect there with respect to the inspection process.

8 I would suggest that there may be an inconsistency
9 in your goal of assuring adequacy in the sense that we have
10 a fair amount of time spent on what I would regard as very
11 low-risk -- not very sharply defined, at least with respect
12 to safety issues, that take time and take resources away
13 from presumably more important and more safety significant
14 matters.

15 My suggestion, and I think the standard suggestion
16 is that minor discrepancies which may need to be noted, may
17 need to be followed can be treated as inspector follow-up
18 items, not necessarily becoming violations.

19 I'm not suggesting we throw out all ideas. I
20 think we ought to pursue all thoughts that anyone can come
21 up as to how to make this better.

22 Here, again, prioritizing around those things that
23 are safety significant, including our resources and our
24 time, all those, and handling the others in a more informal
25 fashion, it seems to me, to be a productive start.

1 CHAIRMAN JACKSON: Thank you.

2 I'm going to make one change in what I said. I
3 had said we would just go around the table, but Mr. McNeill
4 informed me that he's going to have to take his leave
5 shortly. So, Corbin, if you would care to make some
6 remarks.

7 MR. MCNEILL: Okay. The remarks I made just
8 before the break are related to this where it's not clear to
9 me that these areas of assessment oversight and enforcement
10 are properly balanced versus risk. And I do -- I'm somewhat
11 of an outlier in the industry in this area, that I do at
12 least believe that the NRC needs a mechanism at the highest
13 levels, at the Commission level, to have some understanding
14 of the health of the industry and other plants and that that
15 does require some form of assessment.

16 Now having said that, I think the issue here is
17 where you draw a line, and clearly, it's not a bright line
18 between regulatory arena data and that's a truly with
19 safety, along with just normal performance data.

20 And I think that, in part, that is an issue that
21 perplexes us as an industry and is one of the drivers behind
22 some of the interaction or the strong interaction that we,
23 from time to time, have.

24 But I do think that that has to be addressed.
25 Risk, it could be one factor in evaluating where that line

1 is.

2 Likewise, as I said, I'm not so sure that some of
3 the enforcement actions that we get project a true picture
4 to the general public around the risk associated with
5 whatever actions that the NRC takes. And I think that is an
6 issue that needs to be reviewed.

7 I'm not here to present any particular answer,
8 other than to give you sense that I have that enforcement
9 actions -- my judgment would be that enforcement actions are
10 sometimes initiated at too low a level. Let me put it that
11 way.

12 That's not to say that you're not implementing
13 your existing policy. It probably is in reference to a
14 modification to that policy.

15 CHAIRMAN JACKSON: Okay. Thank you.

16 Dr. Pate, Zack?

17 DR. PATE: Thank you, Chairman.

18 Picking up on what Earle Nye just said, as well as
19 Corbin's comments, and indeed, that other people around the
20 table said in the first section this morning, and that is
21 all having to do with the impact on the industry and whether
22 requirements imposed in the plants and on the utilities are
23 reasonable, or sometimes unreasonable and unjustified.

24 I asked myself what I would do if I were in the
25 shoes of the Commissioners or the EDO, and based on this

1 reflection, I want to give you one suggestion that may be
2 helpful in addressing this issue, and perhaps other issues
3 that have been discussed, as well.

4 And that's to suggest that you conduct a high
5 level self-assessment of the NRC's activities that involve
6 the plants and the utilities, and that is an assessment at
7 both the interface between the regions and the plants and
8 between headquarters and the plants.

9 Utilities have used self-assessment to great
10 advantage, often at the urging of the NRC. And, indeed,
11 INPO evaluations and WANO peer reviews are a form of
12 self-assessment.

13 A carefully chosen self-assessment team or perhaps
14 two teams could be put together. The teams, in my view,
15 should report to the Commission or to the EDO.

16 Team members should be selected by the Commission
17 and the EDO. Perhaps NEI could nominate some of the
18 candidates.

19 I would recommend small manageable teams or teams
20 -- a small manageable team or teams of people like, just for
21 example, Jim Snesiak, who is retired from the NRC, or Forest
22 Remick or Jim -- Jim Curtis or previous Commissioners, Bill
23 Conway, who is a retired utility executive more respected in
24 the industry and so forth.

25 These are just examples. I've not, in fact, asked

1 these people whether they would be willing to do such a
2 view, so I stress that they're just examples. But I think
3 you can see that I'm illustrating a team comprised of senior
4 seasoned experienced people.

5 In any event, I would avoid a team that takes a
6 negative approach. The self-assessment should be
7 constructive and forward looking, with a sole aim of
8 improving the regulatory process and not in assessing blame.

9 Of course, one of the principle benefits of a
10 self-assessment initiative is the following: If it's
11 structured correctly and if the right people are picked, it
12 begins to have a salutary effect on the behavior of the
13 organization from the day it's announced.

14 I hope this is a helpful suggestion.

15 CHAIRMAN JACKSON: Thank you. Thank you very
16 much.

17 Mr. Lochbaum.

18 MR. LOCHBAUM: We think that the largest problem
19 with the inspection enforcement in any assessment program
20 are all tied to the same thing, and that's the NRC views on
21 these things are dictated by its -- how it classifies the
22 plant's performance, or how it predetermines the plant
23 performances.

24 If a plant is in good standing, then it gets good
25 inspections. It gets good enforcement action, and it gets

1 good performance assessment.

2 If the NRC places that plant into regulatory
3 distress category, then all these things drop off the board,
4 and there's a step change virtually overnight into the other
5 category.

6 The example we'd use for inspection is D.C. Cook,
7 which was shut down last September following the AE
8 inspection. We went back and looked at the inspection
9 reports issued at that plant in the last two years prior to
10 September, 1997. Fewer than half of those inspection
11 reports contained violations.

12 Since 1990 -- January, 1998, virtually every
13 single inspection report has contained one or more
14 violations.

15 The plant's status did not change overnight, just
16 the NRC's perception of that plant. What in the past
17 apparently was written up as a non-cited violation on
18 nothing is now being cited as a violation.

19 And that the standard shouldn't change. If there
20 were problems before, they should have been reported as
21 problems before. If they're not problems today, they
22 shouldn't be reported as problems today.

23 There's something wrong with that kind of
24 performance, and that's not the only example. It's just the
25 most recent one that we've been aware of. There's probably

1 been some since.

2 We've seen the same thing with performance
3 assessment. We've been involved in the last few months with
4 the IRAP, and we had -- I've had some discussions with
5 members -- NRC staff members on that task force who said
6 that the NRC needs to maintain the ability to adjust the
7 final outcome of any performance assessment program because
8 the process may give a plant too high or too low a rating,
9 and they want to be able to adjust the plant's rating down
10 or up to what they think it really is.

11 And if you don't trust your process, or if you
12 already know what the plants are, just say well, effort, and
13 send them a letter every six months or whatever, however
14 often you want to do it. And don't go through all that
15 process. It's a waste of everybody's time and effort.

16 So -- and if you don't trust your process, then
17 why use it. So I don't -- I'm constantly baffled by that
18 kind of approach to things.

19 And I think, again, it's reflective of the same
20 thing. The NRC staff has a feeling for how these plants are
21 performing and all of it's actions in terms of inspection,
22 enforcement, and assessment are dictated by those overriding
23 philosophies or attitudes, whether they're right or wrong.

24 Thank you.

25 CHAIRMAN JACKSON: Thank you. Commissioner?

1 COMMISSIONER MCGAFFIGAN: Let me go try to go back
2 to where I was going to start and then pick up on something
3 to respond at least or talk at least about -- a little about
4 what Dave just said.

5 I agree with Mr. Nye that there is a problem with
6 the disconnect we have at the moment, and we've -- we're
7 trying to figure out what needs to be done there.

8 The suggestion you made about treating the
9 violations as inspection findings if they're below a
10 threshold of safety significance, I think we need to look at
11 that.

12 There clearly -- we should not be expending large
13 resources -- asking you to expend large resources on
14 something that you found that you have in your corrective
15 action plan already, and that somehow, we torque you around
16 and make it more important than things that perhaps clearly
17 are more important already in your corrective action
18 program, so we've got a problem there.

19 All right. I'm going to be frank about where part
20 of the problem may come from.

21 We don't speak with one voice on the issue. Our
22 Inspector General -- your Inspector General, at last year's
23 reg info conference, I went to a breakout session where Bill
24 Beach was talking about the difference between a non-cited
25 violation and a cited violation at level 4.

1 And I walked out of the meeting and I said Bill
2 just had done a pretty good job to one of the staff that was
3 there, and the staff said, "Commissioner, we're not going to
4 change. You know, we read the Inspector General's report."

5 And, you know, it's the safest thing is to write
6 it up.

7 Yet we also have an Inspector General who will
8 tell us that we need to spend less time on compliance, a
9 famous September of last year report, and more time on risk
10 significant things.

11 CHAIRMAN JACKSON: But risk informed wasn't going
12 to work.

13 COMMISSIONER MCGAFFIGAN: But -- and we weren't
14 doing enough to move towards risk informed.

15 We had an IG report last year about an absolutely
16 trivial security violation at Millstone, where a woman
17 managed to get through the machine using somebody else's
18 card.

19 Millstone identified -- Millstone was dealing with
20 it. Our inspector gave it all due attention that was
21 necessary. He made one mistake. He pretended he -- in
22 writing it up, he was sloppy in writing it up and said he'd
23 done more than he had done in terms of inspecting that
24 particular situation, and he got called on it.

25 You know, we are, in all honesty, if you are one

1 of those people in the field who sometimes get maligned
2 trying to figure out what they're supposed to be doing,
3 they're getting a very strong signal at times, with very
4 high amplitude, that they had best be writing everything up
5 or their career could be at risk.

6 And I think it's -- we need to find a way, and I
7 think the staff needs to find a way to give a clear signal
8 that we'll stand behind the staff if they decide, as that
9 inspector did at Millstone, to -- that this is a trivial
10 security violation. I have better ways to spend my day
11 today.

12 And if somebody comes along and second-guesses me
13 later, we'll back them up.

14 Because it is a matter of applying scarce
15 resources intelligently.

16 The issue of assessment -- I would be very
17 interested if people could tell me -- we have tried to make
18 some changes. We have something. It isn't Jim Curtis and
19 Forrest Remick but the Arthur Andersen group that Chairman
20 Jackson asked to look at our Senior Management Meeting
21 process a couple years ago I think has effected some very
22 good improvements in that process.

23 There is a lot more use of objective data today
24 that has to be refuted -- if it says a plant is an outlier
25 and we decide not to take action, they have to have a good

1 rationale that they can explain to the Commission.

2 We have been trying to make improvements in some
3 of these processes. The plant issues matrices have now gone
4 out to everyone in the last couple months with the latest
5 PPR results and I think we have to align these various
6 processes but the Staff has been trying to improve these
7 processes, make them more transparent.

8 I would be very interested if NEI could survey
9 folks and find out what they thought of this plant issues
10 matrix and whether it was fair and whether it was on point
11 and what they are reading in the plant issue matrix aligns
12 with what they are reading in the various other assessments
13 that they are getting from us. They should.

14 But it is an ongoing process and we are open to
15 trying to improve all of them -- inspection, assessment and
16 enforcement.

17 Finally going back to Joe Callan, we can't let the
18 perfect be the enemy of the good enough in this area either
19 and if we can get a process that is defensible -- it will
20 never be perfect -- can we move on?

21 CHAIRMAN JACKSON: Joe Colvin?

22 MR. COLVIN: Madam Chairman, thank you. I think
23 that you at the summary before we broke, you made the point
24 that what we are talking about is inspection, assessment and
25 enforcement, that they are inextricably linked and certainly

1 that is the view that we have and I think a view in which we
2 need to proceed.

3 Just basically, I think you are aware and I would
4 be happy to talk in greater detail, we have proposed on the
5 industry side a new plant assessment process which
6 integrates in a risk context, a risk-informed context a
7 process by which you focus inspection, you make the
8 assessment processes and you look at how that ties to
9 enforcement.

10 It does so in an objective way that -- you have to
11 get at a common, I think that the key to issue that
12 Commissioner McGaffigan is talking about is we don't have a
13 common understanding of the performance we are trying to
14 achieve at the end of the day and there are probably several
15 different thresholds of levels that we need, so we need some
16 way to measure, some common way to measure the safety
17 performance of nuclear power plants.

18 I don't think we have that, quite honestly. We
19 have a lot of ideas, but we haven't gotten there.

20 I think that goes to Corbin's point also -- if we
21 had this process we would be able to accurately communicate
22 that safety performance to the public and the other
23 stakeholders. We would have a common means of talking about
24 this and then I think we could analyze that data and I think
25 probably more importantly we would be able to have

1 thresholds that distinguish where your expectation of
2 utility action is appropriate and where you as the regulator
3 need to have these steps, and I have some slides to
4 illustrate that and after -- perhaps if we have time I would
5 be pleased to give you a concept of what we are talking
6 about in greater detail -- but I think we have the framework
7 to do that.

8 Probably more importantly, we have the ability,
9 you have the ability to do that now and without any
10 rulemaking process that would take an inordinate amount of
11 time. I think it is within the capability of the Commission
12 and the Staff to put in place, put in place fairly quickly,
13 and does not take any -- the processes should not
14 unnecessarily delay the accomplishment of that task -- and I
15 will stop with that and be happy to speak further.

16 CHAIRMAN JACKSON: Thank you. Mr. Ray.

17 MR. RAY: Let me start with performance assessment
18 and then talk about inspection enforcement separately,
19 Chairman Jackson.

20 I guess I am not as sanguine about performance
21 assessment as perhaps everybody else here is.

22 I do think that for example it can drive perverse
23 behavior -- from the Commission's standpoint.

24 Joe indicated it's safety performance that the
25 Commission is properly concerned with, not performance in

1 some other context, and I would underscore that.

2 The performance indicators that are often used I
3 think you should just be very thoughtful about. Let me take
4 one simple example -- what is sometimes referred to as
5 unplanned capability loss factor. That is a factor often in
6 performance metrics that are used, quite rightly.

7 In the regulatory and safety context however, it
8 is not something that you want to discourage necessarily
9 because it can be a reflection of a conservative, thorough,
10 meticulous attention to detail kind of a program and if you
11 penalize that particular parameter you can, for example,
12 force people to say I am, by god, going to get this thing
13 done in the time that I planned for it and I am not going to
14 have any unplanned capability loss.

15 So I just urge you on the issue of performance
16 assessment to look at it carefully from the standpoint of,
17 as I say, not driving perverse behaviors inadvertently from
18 the Commission's standpoint.

19 Now with regard to inspection and enforcement,
20 this is not the place where I should come and bring to the
21 agency problems that I should be talking about with the
22 region or others. Unfortunately I am here and --

23 CHAIRMAN JACKSON: Or fortunately we are.

24 [Laughter.]

25 MR. RAY: -- it seems to me that there are times

1 when specific examples need to be used. I just want to make
2 the comment that they are not things that I am coming here
3 complaining about, having not gotten satisfaction elsewhere.

4 That is not the case, but I want to share with you
5 some additional data that I included just briefly in my
6 initial remarks.

7 I said since January '97 San Onofre had 21 cited
8 notices of violation on procedure. This is out of a total
9 of only 30 so there were only 9 violations since January of
10 1997 that were not procedure-related or based on procedure
11 noncompliance; 21 that were.

12 In the area of noncited the numbers are -- 37 was
13 the total, 22 are procedure, and 15 were not -- so there is
14 a very, very heavy weighting in the area of violations that
15 we received in connection with procedural compliance.

16 I have already made all the comments I want to
17 make about why that is. I am not going to change. That is
18 just the way we are going to do business there.

19 I am insistent that people comply with procedures
20 but I think I can take care of that myself and I really
21 don't feel that we're productively using the time and energy
22 in that area in the regulatory environment.

23 On the ones that were cited, I want to acknowledge
24 that 3 of them were categorized as having actual safety
25 significance, 6 had none, 4 had potential and 8 had

1 something called regulatory concern associated with them and
2 then there are statistics on the non-cited ones as well, but
3 I won't bore you with that.

4 Now why do I say all this? Well, I have indicated
5 that it is consuming a lot of our time and attention. What
6 do I think you should do? I think that is what you would
7 want to hear from me. We can't -- you can't ignore
8 violations of procedures. It is a requirement that we have
9 procedures and that we follow them -- but you certainly can
10 choose not to take enforcement action if you feel that we
11 are properly managing procedure compliance ourselves.

12 To use Joe Callan's point, there needs to be
13 robust guidance provided there. I think Commissioner
14 McGaffigan's comments about what are the incentives that
15 inspectors have in the field is surely on point. Is it well
16 understood and is there some robust guidance available to
17 the Staff?

18 One of the things that helps with guidance I find
19 is to focus people on what is important -- in other words,
20 we can try and contrive some complex set of rules for
21 inspection and enforcement in the area of procedure
22 compliance, but probably will never get anything terribly
23 satisfactory. What I think is going to produce the results
24 that we all want to achieve is what I have done with my own
25 staff and that is to say what you do every day has got to be

1 driven by some understanding of the connection that it has
2 to safety and you have got to defend it on that basis.

3 That means that time and effort is going to have
4 to be put in to develop an understanding and to make
5 judgements that are defensible based on the fact that they
6 truly are related to safety, not simply that it is a
7 noncompliance and that is my sole justification for writing
8 it up, period.

9 I don't know if that was very helpful to you. I
10 want to pass on the additional data and I did want to
11 introduce this note of caution about performance assessment
12 because I do have experience where I think it can motivate
13 the contrary behavior to what the Commission really wishes.

14 CHAIRMAN JACKSON: Well, let me make sure I
15 understand something vis-a-vis performance assessment.

16 Is your concern with it relative to performance
17 indicators driving the process to some undesirable result or
18 are you arguing that the agency perhaps should not do
19 performance assessment at all?

20 MR. RAY: I might like to make the latter
21 argument --

22 [Laughter.]

23 MR. RAY: This is not a good place for me to do
24 it, I don't think, just because of the circumstances and the
25 clock and so on.

1 I am just urging that you, given that performance
2 assessment is something the Commission has deemed important
3 and necessary, that you give careful thought to the metrics
4 that you use in performance assessment to ensure that they
5 in fact are linked to safety because not every indicator out
6 there is.

7 Let me take another example, just radiation
8 exposure, and we were talking about the experience at Big
9 Rock Point, which I am learning about it now than I knew
10 before, but be that as it may, it is arguably possible that
11 radiation exposure could have been increased by some
12 requirement that would have been deemed appropriate to go
13 and inspect whatever it was that wasn't right or perhaps to
14 maintain something that is important to safety, but it
15 creates a radiation exposure, manrem exposure.

16 The industry rightly should be pursuing an ALARA
17 program, but not at the expense of doing the things that are
18 important to safety. There is inevitably a trade-off there,
19 something that is very good, low manrem exposure at the
20 plant, we just need to be sure it is not driving us to not
21 do things that create radiation exposure inevitably.

22 CHAIRMAN JACKSON: Well, I think the problem we
23 all have in talking about Big Rock Point as an example is
24 that --

25 MR. RAY: I don't mean to --

1 CHAIRMAN JACKSON: -- that the data is not in, but
2 no, that does not obviate the point I think you are trying
3 to make in terms of one desirable outcome can have an
4 adverse effect on another desirable outcome, but I think
5 what we all would like to reach is a point where we
6 understand and that there is a clear statement, particularly
7 in risk-significant areas, that those tradeoffs are
8 understood and have been resolved in some way.

9 I think that is the way that one addresses that
10 kind of issue, because I agree with you that those kinds of
11 tensions are going to exist in any operation.

12 MR. RAY: I have been troubled, as you can tell,
13 by this high rate of NOV's that we have had for a long time.
14 This isn't a recent experience. I mean Joe and I talked
15 about it when he was a regional administrator.

16 I pointed out that I believe you have made remarks
17 that, well, noncompliance, numbers of noncompliances ought
18 to be an indication of performance.

19 CHAIRMAN JACKSON: Well, I don't know -- I've
20 never quite said it that way.

21 MR. RAY: Well, that is the inference I got, maybe
22 wrongly, from something I read.

23 CHAIRMAN JACKSON: I think so.

24 MR. RAY: In any event, the point is that I am
25 committed to what we do as producing the safest result and I

1 just think we all ought to have a chance to talk about that
2 in the course of establishing a performance assessment
3 matrix, however they are chosen.

4 CHAIRMAN JACKSON: No, I understand. Very good.
5 Thank you. Sam.

6 MR. COLLINS: I am going to be brief. I don't
7 disagree with any of the concepts I have heard given the
8 common philosophy of the dedication of resources, both the
9 licensee's and the agency's towards what is truly important
10 I think that approach can be taken in assessment,
11 in inspection, and also in enforcement. We have in fact met
12 with NEI, public meeting, on the indicators. I think we
13 provided fairly positive feedback on that. The staffs are
14 continuing to work.

15 To speak to David's point I think any indicator
16 needs to be mutually agreed upon, so we engage ourselves
17 based on the results and not on the information itself,
18 which is a tendency that we currently have with the
19 processes that are in place and I agree with David's point
20 that it needs to be scrutable. I think the IRAP always had
21 a box for more than one process to be able to cross-check
22 the agency's IRAP proposal and we had a tendency to lean
23 overly on enforcement and we have the clear message from the
24 Commission to reassess that and we will do that in a public
25 way with a meeting in August, we hope.

1 We have had a number of internal discussions --
2 Joe may speak to that directly -- in fact, as early as
3 yesterday, with two members of the Commission dealing with
4 proposed enforcement and issues which touch upon many of
5 these areas to reach to the point that Joe and Commissioner
6 spoke to, we have to be willing to accept licensees'
7 processes as being able to disposition items of less than
8 significant safety impact.

9 We have to be willing to let go of our current
10 processes and we have to be willing to have a different type
11 of follow-up to violations and focus on those types of
12 issues that are truly safety significant and bring us
13 meaningful information on the status of the industry.

14 In terms of assessments, I just happened to list
15 the number here and the number I have, it's not complete, of
16 ongoing assessments within the NRR program office and the
17 number is seven.

18 Two of those are JTAs where we are looking at
19 regional inspection and licensing PMs and follow-up to that.
20 One is an internal initiative by a contractor, Cox &
21 Associates.

22 We have two in progress with Arthur Andersen and
23 we have at least two that I know about, OIG reviews, looking
24 at our processes.

25 I only say that to indicate that we are receptive

1 to all of those but the last two being independently
2 initiated.

3 We are receptive to self-perception,
4 introspection. I would sign on with any type of insights
5 that could be derived from independent parties with the
6 caveat that the intent should be focused and the intent
7 should be mandated in a way that it has I believe Commission
8 EDO buy-in into what are we trying to achieve and how will
9 it be measurable in the product line -- the types of
10 initiatives that I mentioned earlier with the seven really
11 are refinements of existing processes.

12 I understand Dr. Pate's point and it is a good one
13 is that we need to look at some of the fundamental precepts
14 and concepts by which we operate. That would be a different
15 type of review. It would clearly have to be mandated with
16 some fundamental goals involved.

17 With that, I think I'll leave the remaining points
18 to Joe.

19 CHAIRMAN JACKSON: Actually, I am not quite going
20 to Joe yet. Since Karen is at the table, I am going to
21 offer her the opportunity if she has any comments in this
22 area because some of these things get into somewhat
23 legalistic considerations.

24 MS. CYR: Well, again I think the Commission has a
25 lot of discretion in terms of how it approaches an

1 enforcement program in terms of being able to structure a
2 program that focuses on those things that are most safety
3 significant and to in fact rely on licensee's programs and
4 followup, and if that is what they choose to do I clearly
5 think that is something within our authority to do -- within
6 any agency's general authority to do.

7 CHAIRMAN JACKSON: Thank you. Joe.

8 MR. CALLAN: I am not going to belabor these
9 points, but I will just say that the Staff in fact
10 understands that we have a lot of work to do with
11 enforcement, particularly what we call non-escalated
12 enforcement, the type of enforcement that is below the level
13 where we would consider civil penalties or other sanctions.

14 We have a lot of work to do.

15 Jim Lieberman, who is sitting in the audience, who
16 is our Director of Enforcement, Office of Enforcement, asked
17 me yesterday afternoon if he should come to this room and
18 observe -- watch it by television. I told him to come here
19 in person.

20 [Laughter.]

21 MR. CALLAN: In fact, right now, and I think Jim
22 would nod his head, this subject is probably on the top of
23 my list in terms of my priorities. It's kind of
24 embarrassing to admit this but I think Harold referred to
25 this fact. When I was Regional Administrator it took him

1 actually to shine a bright light on problems I had internal
2 to the region. I mean we had significant non-escalated
3 enforcement consistency problems within a branch -- one
4 branch -- not to mention among the various branches.

5 Now I am EDO and it actually took Earl -- your
6 staff -- who came in a year ago and shined a bright light on
7 significant consistency problems amongst the plants around
8 the country, so all my insights I have gotten from the
9 industry, which points out the fact that as an agency we
10 have not focused management attention on non-escalated
11 enforcement up until about two years ago.

12 It has not been an area of management attention.
13 We have focused most of our management resources,
14 particularly from headquarters, on escalated enforcement,
15 and we can talk about that, but for every escalated
16 enforcement action we basically have 25 non-escalated cases,
17 about half of which are cited and the other half are not
18 cited, so it is about a ratio of 25 to 1, and we just
19 haven't really focused on that in terms of, well, the kind
20 of management attention that we should be focusing on.

21 What has happened I think is that the industry has
22 gotten better to the point where now non-escalated
23 enforcement in my view is almost as important to a plant as
24 an escalated enforcement action was 10 years ago in terms of
25 the way the plant internalizes it, the way plant management

1 reacts to it, and the significance of it, and our processes
2 just didn't keep up with that reality, so we are scrambling
3 and looking for ideas.

4 We are meeting frequently on the subject and
5 thinking of and working with industry groups such as NEI to
6 come up with schemes and, as Karen mentioned, OGC has been
7 quite supportive in enabling the Staff to think of
8 approaches that are nontraditional to deal with this.

9 I will just finish by saying this, that despite
10 what I said about the insights I gained from Comanche Peak
11 and San Onofre regarding the problems we had, the most
12 compelling arguments I have heard regarding the need to make
13 changes in an urgent fashion on non-escalated enforcement I
14 get from the meetings that I have from time to time with
15 plant managers.

16 INPO hosts groups of plant managers who come here
17 about every three months. These are groups of -- well,
18 actually plant managers-to-be. It is a training course and
19 they are usually, in fact, Commissioner McGaffigan, you
20 sometimes attend, groups of 15 to 20 individuals who are
21 typically operations supervisors, maintenance supervisors,
22 sometimes they are actually plant managers, and I have been
23 through maybe a half-dozen of them since I have been here,
24 and the first thing that is on their mind when you ask them
25 what is on your mind is this subject.

1 The issue to them is they plan their activities
2 and they allocate resources at the station based upon their
3 prioritization of all the problems that they have on their
4 plate and they prioritize in a fairly sophisticated manner,
5 most of them, taking into consideration risk insights and
6 resources, and then we come along with an initiatives --
7 say, a procedure violation at San Onofre, and that trumps
8 everything.

9 That trumps everything on their plate and so they
10 have to drop what they are doing basically, reorder their
11 priorities, and deal with our problem, and our problem, if
12 we were to objectively assess it in the context of their
13 priorities, we would probably agree in many cases, most
14 cases perhaps, that it would be well in the pack and not
15 deserve that kind of treatment but they have no option.

16 Under our current process, they really have no
17 option but to reorder their priorities and that message
18 comes over, over and over again, in a very heartfelt way,
19 and so to me from a safety perspective, risk perspective,
20 that is the most compelling argument of all, to make the
21 changes we need to make with enforcement.

22 I will stop at that.

23 CHAIRMAN JACKSON: Okay.

24 DR. REMICK: Along with what Joe just said, I
25 think somebody earlier said the Staff always wins and that

1 is largely true.

2 Harold reminds me of something I might share with
3 the other Commissioners because I think it is very important
4 to remember what you say and how you say it can be
5 significant on what the Staff does.

6 I learned as an early Commissioner an offhand
7 comment in the presence of Staffers, something to the effect
8 that I think the agency should be doing this, and lo and
9 behold about a month later -- "Commissioner Remick, here is
10 what you asked for" and I realized and I tried to use it on
11 a number of occasions at Commission meetings where I would
12 tell the Staff why I think you should do this, but then I
13 would say, but remember, instructions from the Commission
14 come through Staff requirements memoranda, they don't come
15 from offhand comments from Commissioners telling you what to
16 do.

17 To address the question of inspections, there is
18 no question in my mind inspections are important. They do
19 sometimes come up with safety significant findings.
20 Sometimes they come up with a lot of trivia. Just to give
21 you an example, in the last week while reading an inspection
22 report of a facility -- fortunately I don't even remember
23 which one it was -- at a time I guess when I had nothing
24 better to do in Happy Valley or couldn't sleep or something
25 like that --

1 [Laughter.]

2 DR. REMICK: -- I was reading this inspection
3 report and in the inspection report the inspector pointed
4 out that the licensee was using a hand calculator rather
5 than a computer to calculate effluent releases.

6 Fortunately, later on in the inspection report, he
7 pointed out that those hand calculations, however, were
8 okay. I asked, well, maybe that is good advice. It is
9 something I might expect in an INPO evaluation -- if that
10 truly is the computer is better than the hand calculator to
11 do it, I would expect that they would pass that information
12 on -- but I really question, even though it might be good
13 advice, what is it doing in an inspection report? It might
14 even be just an offhand comment of the inspector. Do you
15 know other people are using this particular software in a
16 computer to do it? But I question whether it was an
17 inspection report although fortunately it certainly did not
18 lead to a notice of violation, but I think there is a
19 balance missing in many inspection reports of the type of
20 things that are discussed. Are they safety significant?
21 Are they tied to the regulations -- and so forth. I think
22 senior management and the Commissioners have to keep asking
23 that question.

24 On the question of enforcement, I strongly agree
25 there is a disconnect between the number of Notice of

1 Violations and the civil penalties associated and there is
2 another aspect. There has been a recent trend I believe in
3 aggregating Notice of Violations that makes some sense.
4 Maybe it is even more efficient, but I have been involved in
5 some litigation as a witness in which people use the fact
6 that these things have been aggregated into a larger number
7 and then saying this must be poor management because this is
8 the "x" highest number that has ever been given to a
9 licensee.

10 I think that is misuse of the information which
11 might otherwise be well-intended.

12 I have always felt that the enforcement process is
13 too punitive and that sometimes it appears to be intended to
14 be setting an example, not necessarily for that licensee,
15 but for the industry, and I think that is misuse of the
16 process.

17 To give you an example, as a former Commissioner
18 on enforcement action, I remember this one. A matter had
19 come up to the Commission. I believe it came to the
20 Commission because there was a difference between the
21 enforcement office and the Staff and in this it had to do
22 with employee concerns, problems, and in this the Staff had
23 written that the licensee had done this and the licensee had
24 done this, and the licensee had done this, and the licensee
25 had done this -- but the problem wasn't solved, therefore a

1 \$100,000 fine.

2 My reaction was but they did all these things that
3 seemed to be logical type of things. They didn't work
4 apparently, admittedly, but the agency is not able to say
5 yes -- something that they should have done, and I certainly
6 sitting and thinking about it couldn't think of anything
7 that I would have done in a similar situation.
8 Unfortunately I lost on a 4-to-1 vote, but I still felt
9 proud that I was the one who voted against that enforcement,
10 but sometimes it is not clear why somebody is being
11 penalized, even though they have tried everything that we
12 can conceivably think of as an agency.

13 On the question of assessment, I would just second
14 what Joe Colvin has said, and I have had no involvement with
15 the NEI approach on the assessment process but I have heard
16 it discussed and I have read about it and I find it exciting
17 because it basically goes to the point of what are the
18 objectives that we are trying to seek?

19 Let's define those objectives and do it
20 collegially to get to those objectives and then set up
21 indicators of whether we are achieving those objectives, and
22 base the assessments on that.

23 I find it a very logical approach and I think it
24 is something highly worth considering. I think it would be
25 a definite improvement over the current assessment

1 processes.

2 CHAIRMAN JACKSON: Thank you. Commissioner Diaz?

3 COMMISSIONER DIAZ: Let's see. First of all, I
4 want to make a quick comment to Dr. Pate, who suggesting
5 have teams of senior people. I think teams are great.
6 Let's bring some junior people in the teams.

7 DR. PATE: I agree.

8 [Laughter.]

9 COMMISSIONER DIAZ: So that people from the
10 trenches --

11 I am going to go back to what Commissioner
12 McGaffigan said and try to put a couple of comments.

13 The Commission has been working I think
14 practically since I got here to make better inspections and
15 assessment processes. We even called them integrated and we
16 realized there were too many levels, too many different
17 inspections and assessments. They were too fragmented into
18 too many offices.

19 I think we are getting to the point where we now
20 understand how fragmented they were -- maybe we even
21 understand where we should be going with them.

22 One thing that, you know, has always been lacking
23 is enforcement and I think enforcement lags because in
24 itself it's an integrated process, and so it just lags
25 everything behind, but it is an important part and it should

1 be as integrated and consistent with inspection and
2 assessments as anything else.

3 There is another element that I am glad Commission
4 McGaffigan brought up and that is how consistent and how
5 integrated is the Office of the Inspector General with
6 whatever else we do? Inspector General is an independent
7 office and they do things independently and we respect that
8 independency.

9 However, I think the Commission needs to have some
10 assurances that what the Inspector General is assessing is
11 consistent with the Commission rules, regulations, and
12 policies, and maybe in that case, you know, some integration
13 in the policy area of what we do with enforcement and
14 inspection on assessment and how it reflects what OIG is
15 going to do independently might be a very good idea.

16 That's it. Thank you

17 CHAIRMAN JACKSON: Okay. Are there further
18 comments anyone has in this arena? Have I missed anybody?

19 Why don't we move on and talk about --

20 COMMISSIONER MCGAFFIGAN: Madam Chair, there's
21 just one item. I'd like to address a question to Joe if
22 it's okay?

23 CHAIRMAN JACKSON: Sure. Sure.

24 COMMISSIONER MCGAFFIGAN: It's a high priority
25 figuring out how to deal with this non-cited violation

1 issue. Do you want to share any initial thoughts that Karen
2 will let you share?

3 MR. CALLAN: Well, I'll just say that --

4 COMMISSIONER McGAFFIGAN: How do you propose to
5 solve it? Because we all recognize it's a problem, the
6 staff recognizes it's a problem. I know there are some
7 thoughts out there as to how to get rid of this torquing
8 people around when they don't deserve to be torqued issue at
9 least is --

10 MR. CALLAN: Well, one of the most exciting
11 approaches as Forest Remick -- I was going to say
12 Commissioner Remick -- referred to is coming out of NEI.
13 The thinking that is going on at NEI with the team that they
14 formed -- industry team -- to come up with this new
15 assessment process that does what IREP, our version, didn't
16 do very well. It truly does provide a mechanism for
17 integrating enforcement into the assessment process and it
18 basically avoids the trap, I think, that Dave referred to
19 which is the notion that if you get the wrong answer you
20 have to apply, you know, kind of a J factor. That was true.

21 In fact, I would say that was probably the fatal
22 flaw of the IREP was that we didn't have enough confidence
23 in the answer we would get, so we wanted that kind of escape
24 path.

25 With the NEI approach, as I understand it now, we

1 may be able to avoid that problem. But anyways, in its
2 essence, the industry thinking that we're looking hard at
3 would establish thresholds of performance in various
4 categories. And as long as a utility's performance meets or
5 -- either above or below, how ever you want to look at it, a
6 certain threshold then the regulatory environment is more
7 benign for them because they meet some standard of
8 excellence, quite frankly, in performance. And then as long
9 as they're in that zone of performance then our enforcement
10 process would take that into account and perhaps violations
11 would not be cited, a document would not be -- there are
12 various ways of approaching it. And if they are outside
13 that zone we approach enforcement differently. They even
14 defined a zone, what they call a "red zone" of extremis in
15 which case the enforcement posture could be quite harsh.

16 So that's the kind of thinking we're doing.
17 Internally Sam and I kick around ideas with the staff, for
18 example, looking for ways to integrate non-escalated
19 enforcement into a utility's corrective action program. And
20 we're seeing that these programs are becoming quite
21 sophisticated across the country. And I think in Dave's
22 opening comments he noted that management determines whether
23 or not the off-the-shelf program works or doesn't work, and
24 we understand that. But assuming it works, can we use that
25 to prioritize a utility's response to our issue.

1 COMMISSIONER McGAFFIGAN: Could I follow up
2 though? My question is more short-term than I think getting
3 to an assessment process that's different from the one we
4 have today, and that's with the severity level fours and
5 non-cited violations, minor violations that are out there
6 today, are there thoughts being given to how we today
7 totally aside from the assessment process look at severity
8 level fours and the degree to which -- I mean, if we
9 recognize today that in many cases we are forcing people to
10 put something higher up in a corrective action list that's
11 already on a corrective action list, should we back off.

12 When you met with the senior managers the last
13 time you threw out a notion of not requiring the degree of
14 response, having the degree of response to a severity level
15 four be the same as what it is to a non-cited, so they don't
16 get torqued around as much. Are there things like that we
17 can do sooner?

18 MR. CALLAN: Yes, there are. In fact, there are
19 some very near-term actions that I don't -- I've got to be
20 careful here because we're -- we don't have Commission
21 buy-in yet, but there are some very near term actions that
22 again the cliché of low-hanging fruit that we're plucking
23 quickly, that we're going to do that will reach to some of
24 those kinds of questions.

25 One thing, by the way, that started about a year

1 ago is we added resources to the office of enforcement which
2 we're paradoxically because by adding resources we feel like
3 we can not make enforcement more aggressive or assertive,
4 but rather to provide greater discipline in the enforcement
5 process. So we're taking steps -- we've been taking steps
6 to -- I think the critical threshold in enforcement quite
7 frankly, the critical threshold is the threshold that
8 demarkation between what we call a minor violation which is
9 a category of violation that we don't even document. And
10 it's a defined threshold.

11 We tell inspectors, we have explicit guidance to
12 inspectors that if a violation of non-compliance is labeled
13 minor, a minor violation unless they have a very compelling
14 reason they're not even to document -- it's not even worth
15 the resources of document. The threshold between that
16 category and what we call level four violations which is the
17 category we cite, has not been policed. And we're doing
18 that now. That's where a lot of mischief can occur in that.

19 COMMISSIONER MCGAFFIGAN: Madam Chair, one last
20 point, and this goes to a point of I think Joe made earlier
21 about our communications with the industry. I someday, and
22 the Staff has gotten very different guidance -- I had this
23 conversation with Frank Miraglia at the reg info conference.
24 The Commissions over the years have kept the staff on very
25 short leashes at times and said everything is predecisional

1 and don't talk about anything, and then at times we've said
2 go talk and they get confused.

3 As people probably know coming from Congress of
4 the school that we should have a lot of conversations pretty
5 much out in the open, always subject to the Commission
6 potentially overruling if we don't like what the staff
7 produced, but if we're kept closely informed as to what the
8 staff is thinking they're probably not going to get too far
9 astray and so I'm not going to prolong the discussion but I
10 do think allowing the staff to talk pretty openly about how
11 we're going to solve these problems even if they don't have
12 Commission buy-in, that's my only point. I don't mind the
13 staff talking quite openly about ways to solve problems and
14 brainstorming about them even though I have not yet -- it
15 ultimately is going to be a policy matter that has to come
16 to the Commission and they're going to have to get a yea or
17 nay out of the Commission. But I just thought I detected a
18 sense of that in Joe's comments.

19 MR. CALLAN: Well, you know, part of it, though,
20 is by me speaking with too much certainty on some of these
21 ideas I put my thumb on the scale. The staff has to work at
22 some of these issues, too, and I'm not saying I represent
23 staff views. I represent my own views. I think I talk
24 enough to Sam and some other senior executives, I can maybe
25 claim I represent their views. But we have to make sure

1 that we develop issues broadly. And I don't want to skew
2 that process. That's why I'm a little hesitant.

3 CHAIRMAN JACKSON: Okay. Let's take up the issue
4 of timeliness. And, Earl, you sent us a very thoughtful
5 piece on NRC adjudicatory processes and so I thought that
6 I'd like to ask you to share some of those thoughts openly.

7 MR. NYE: Thank you, Chairman. I don't want to
8 take away from other comments, but I will say we had some
9 experience in a prior lifetime with respect to timeliness of
10 various kinds of activities and particularly the ASLB
11 process and you asked for comments about how our experience
12 might apply to relicensing. And while we are not quite on
13 the verge of relicensing we know others are and we would
14 like to facilitate that. So we did send a letter and you
15 were very kind to respond I thought in a very thoughtful
16 manner, and I was very pleased with that and frankly I am
17 encouraged by what was said and what was implied in your
18 comments. I don't know that it's worthy of taking that
19 diversion at this point, but timeliness is important.

20 I was sitting here thinking and this is probably a
21 digression also, what list of to do things am I taking from
22 this? Because I made a note here, what is the industry
23 willing to do and what has the industry done and self
24 appraisal being what it is, perhaps we're not in the best
25 position to say what we've done, but I think that NEI has

1 been fairly active in trying to be constructive. But I'm
2 curious, what is the process that takes us from this place,
3 what kind of a authority is the Commission willing to
4 delegate to staff and other, and what is the expectation
5 that they would have. And I'll just leave those as open
6 questions.

7 CHAIRMAN JACKSON: Thank you.

8 MR. LOCHBAUM: I think as far as the timeliness
9 the one example that I'll choose to talk about today was an
10 event that happened up in Perry that we got involved in last
11 June. The plant had suffered an unplanned SCRAM due to, I
12 believe, a transformer failure. That problem was fixed
13 relatively quickly and the plant was on its way in startup
14 to restart when the NRC staff showed up with a list of three
15 things that needed to be fixed before they would allow the
16 plant to restart. Although it wasn't exactly stated in
17 those terms, but it was -- the heavy arm was there and those
18 three things were fixed before the plant started up.

19 I called the resident inspector when I heard about
20 that to find out when those three things were identified.
21 He told me they were identified by the NRC during
22 inspections in January and February of that year, but they
23 weren't serious enough to shut the plant down. Yet, when
24 the plant does -- due to some untoward reason it's a big
25 enough issue to keep the plant from restarting. It doesn't

1 make any sense to us. I don't know why that happens.

2 I had worked as a consultant at Perry before
3 joining UCS, so I talked to some people who worked on fixing
4 those three items. Since they were needed to be fixed
5 before the plant could restart, it was a band-aid fix. The
6 individual I talked to said he wasn't even sure they would
7 last until refueling. But it was enough to get the plant to
8 restart.

9 The whole process was a waste of time and effort
10 and didn't do anything for safety. And the fact that things
11 like that happen in 1997 is baffling. And, again, that's
12 not the only example, but I don't understand how things like
13 that happen in this environment. Thank you.

14 CHAIRMAN JACKSON: Thank you.

15 COMMISSIONER McGAFFIGAN: Timeliness. I do want
16 to also compliment Mr. Nye for his letter and for some
17 previous interactions we've had on this issue of the
18 adjudicatory process.

19 One of the major points in Mr. Nye's letter I want
20 to get out in the open is the notion that at some point we
21 may need to go and get authority to have legislative style
22 or informal hearings for issues such as license renewals,
23 such as license transfers, such as the ATWS application that
24 we may get from USEC next year.

25 You can make a case at the moment that we could by

1 rulemaking try to do some of this, but if we don't have
2 Congressional buy-in that rulemaking could be perilous. And
3 so I think if Congress -- one of the "to dos" that may come
4 out of this, Congress may well provide us as we go forward
5 to hearings a couple of weeks from now under the new
6 Congress, but one issue that I would urge people to think
7 about is whether we should seek amendments to sections 189
8 for most licensing cases and 193 for ATWS so that we could
9 use more informal proceedings.

10 We just went through one and the Commission very
11 much appreciated Mr. Lochbaum's letter about the legislative
12 style hearings we went through in Millstone. He didn't
13 agree with our conclusion, but the process he complimented
14 us on and I think you can run -- if you can come out of the
15 legislative branch, you can run legislative style hearings
16 very fairly and efficiently and get the issues on the table.

17 Other agencies of the Government, the FAA, was
18 referred to earlier, where they certify aircraft without
19 adjudicatory hearings. The FDA yesterday decided
20 thalidomide was safe enough for use in leprosy applications
21 with very strong license conditions presumably on
22 pharmacists, et cetera, they did that without adjudicatory
23 hearings. The EPA recently decided the waste isolation
24 pilot plant was safe enough for EPA to commence operations
25 without adjudicatory hearings. And so I do think that

1 there's a major question as to whether adjudicatory-style
2 hearings are the most efficient way to carry out our
3 business. And obviously we have some recent cases that
4 raise questions and I don't know, we're going to try.

5 The Chairman in her letter to Mr. Nye said we're
6 working on a policy statement, but having watched American
7 jurisprudence -- I'm not a lawyer, I should add -- I'm not
8 sure how far we're going to be able to go within an
9 adjudicatory setting in streamlining a process. Those two
10 terms may be incompatible.

11 CHAIRMAN JACKSON: Oxymorons.

12 COMMISSIONER MCGAFFIGAN: Yeah, oxymorons.

13 With regard to timeliness of other areas, one
14 thing I've learned is if we give an area significant
15 attention we can speed up the processes at the senior
16 management attention. The AP 600, I think Sam Collins has
17 correctly gotten a lot of compliments for how the AP 600
18 process has worked in the last seven or eight months as
19 they've worked through the issues to get to final design
20 approval there.

21 The improved standard tech spec process, we didn't
22 get a lot of compliments early, although Sam's predecessor
23 was promising six-month reviews which we never really were
24 capable of doing, but we are -- we have learned and there
25 was a recent interaction I heard about where the four loop

1 group came in and met with Sam and Joe and on their own the
2 two senior managers raised the question of why are the
3 requests for additional information so voluminous here. The
4 licensees weren't even asking that. They were just trying
5 to get the trains to keep running on schedule.

6 There are other areas, however, where we have a
7 ways to go and dry cask storage comes to mind, how we're
8 dealing with some of the decommissioning plants come to
9 mind, and we sort of have this rolling area where we shine
10 spotlights on things and as we shine the spotlights we can
11 solve some issues. But the fundamental issue on timeliness,
12 I think Joe Colvin has already talked about and that is the
13 issue of a perfection standard, a working the asymptotes or
14 the Nth-order terms, the equation standard versus a standard
15 that's good enough and appropriate to the circumstance we
16 have. And if there's a cultural change, I think Mr. McNeill
17 before he left talked about cultural changes and
18 dichotomies, but there's a cultural change that we need to
19 bring about, it's getting a standard that is good enough and
20 is very detailed in cases where it's necessary where we
21 really rake somebody over the coals on a safety significant
22 issue, but where it's a very straightforward process.

23 Gary Hollahan in one briefing to Commissioner Dias
24 and me talked about a nanosecond clearance process and Steve
25 Burns promised a second nanosecond for OGC concurrence for

1 some of these trivial things that come before us. But we
2 don't have that. I mean, when I said that to an industry
3 executive a few days later in a meeting he said, I'd like to
4 know what an NRC nanosecond was. So we have a ways to go.

5 MR. COLVIN: Define a nanosecond.

6 COMMISSIONER McGAFFIGAN: Yeah, define a
7 nanosecond.

8 [Laughter.]

9 COMMISSIONER McGAFFIGAN: But if we shine -- and I
10 think license renewal, probably the most important area, we
11 have Frank Miraglia at the moment empowered to keep an eye
12 on that process and deliver SERs and environmental
13 statements by late next year in the case of the initial
14 applicant. So we've got to figure out how to do that more
15 broadly and not have to -- not have that require the degree
16 of senior management attention it seems to require in order
17 to bring it about. But that involves empowering people at
18 lower levels to a different standard from what they have
19 today.

20 MR. COLVIN: Chairman, thank you. I'd like to
21 pick up on just a couple of comments and then on to your
22 basic theme. With respect to the hearing issue, I would
23 support the efforts you have underway and the leadership
24 that this Commission is taking in relooking at the hearing
25 issue. We have analyzed that over the years and I would say

1 we don't think that the processes that the Commission uses
2 are necessarily embodied within the statutory requirements
3 law. They certainly have been used to a great degree, and
4 we would support your efforts from the legislative arena to
5 support your efforts to make the appropriate changes.

6 A second issue I guess I would put under the
7 heading of when I look at timeliness and I look at the
8 comments that Mr. Lochbaum made, the double standard issue,
9 I think we really need to go back to the key point in my
10 mind, that is confidence that we develop in the process.
11 And I think confidence in the process drives schedule and it
12 drives the perceptions. And if you take a look at some of
13 the issues that we have faced or are facing, I mean, let me
14 just throw a couple of examples, and it leaves those as
15 illustrative and not to get into the details. But if you
16 look at it and take a step back and look at the timeliness
17 to make a decision on bearing the Trojan reactor vessel in
18 tact, and you look at that and say, that's been done for
19 many, many years through the Navy process. It's done
20 routinely, and yet we have spent nine plus months looking at
21 it and now we've outlined a process which will take a year
22 to develop the process and a year to implement the process.

23 Now, I know there's changes being applied and
24 there's improvements to that, but on its face it says that
25 that's a very difficult hard thing to do and yet I think

1 what that does is undermine a confidence that the industry
2 has that decisions will be made in a timely manner only gets
3 people into the, this is very hard, when it ought to be
4 fairly easy to make those decisions. Dry cask storage
5 licensing and I do agree with the concept or the discussion
6 that Mr. McGaffigan made of shining a light on there. We
7 see tremendous commitment out of NMSS to shorten that
8 timeframe and that's very important as you all know, and I
9 won't go into the reasons. But I think that if we look at
10 -- we seem to get back to the point, we've got to decide
11 what the end objective is and then we can set the time
12 schedule to meet that appropriately.

13 If we take license renewal, I mean, it's very
14 important, but if we set the schedule without defining the
15 end objective and setting the scope, the scope will
16 ultimately drive the schedule and we won't meet the
17 deadlines we have to make. So that comes back to the
18 central objective of each of those issues. What do we want
19 to do, how are we going to measure, what is success, and
20 then set the schedule to meet that and then I think we can
21 make those changes.

22 So I'll be happy to speak more to that, but in the
23 interest of time I'll pass.

24 CHAIRMAN JACKSON: Thank you. Harold?

25 MR. RAY: Thank you. Chairman Jackson, as the

1 chairman of NEI's regulatory process working group it falls
2 to me to try and maintain often industry support for much of
3 what we're talking about here. And I must report to you
4 that there is -- it's increasingly difficult. There's a
5 skeptical world out there, but on the other hand I'll tell
6 you, I think there's a craving to see progress to the point
7 that all we need to do is show some progress and the
8 skepticism will evaporate.

9 I give you as an example, I was just at the recent
10 meeting. I shared where we stood on 50.59, a meeting we had
11 with you all in which we indicated we understood the
12 separation of the issue of scope and one that was going to
13 be addressed as to what the scope part of 50.59 should be
14 and so on. There was real satisfaction, I think, and I want
15 to feed back to you on the part of the industry that, well,
16 it looks like there's progress being made. This a logical
17 thing to do. Do you have confidence that we'll really be
18 able to come to grips with this issue and run it to ground
19 in a reasonable time, I said, yes, I did.

20 So there is a desire, and like I say, a
21 willingness to believe that we are in fact going to overcome
22 what is perceived to be a problem with timeliness at least
23 in the narrow area that I'm talking about with you now.

24 On the other hand, let me say that I think we're
25 getting all that we can out of the people who are having to

1 get the job done today, and that whereas I think you have
2 sufficient resources in the Agency, there's no doubt in my
3 mind, and this may be gratuitous, and if it is, please
4 forgive me, but I think that resources are going to have to
5 be redeployed into these areas that are going to require a
6 lot of work. It cannot get done by a waving of the wand.
7 It is going to require a hard slog in many areas. We are
8 going to have to join with you in order to make the result
9 as efficiently arrived at as we can. And let me just leave
10 that there, then.

11 The last thing I want to say with regard to
12 timeliness is back on my third overhead in my opening
13 remarks, it's on the issue of restructuring, you've now
14 heard it said many times and I perceive it perhaps doesn't
15 need to even be said to you. But there is this train coming
16 and when I think about skepticism, I have to think in terms
17 of the world that I spent a lot of my time in and that is
18 where we're restructuring the industry.

19 I have now closed and gotten in hand the money for
20 the sale of 12 generating plants that my company owned up
21 until a couple of weeks ago. That process went forward in
22 accord with the changes that have taken place in California,
23 and as you know, it's happening in other parts of the
24 country. The nuclear plants are in line. They're going to
25 have to get out of the utility or shut down. And there is a

1 whole lot of people who believe that we're not going to find
2 a way to get them out of the utility that they're going to
3 have to shut down.

4 I am committed as I think everyone else here is to
5 the proposition that that isn't the case, that we will be
6 able to transfer these licenses, but it will not, of course,
7 happen if the pattern of experience recently in taking such
8 actions continues in the future. I know you're committed
9 that that will not be the case, I just want to underscore
10 that there's a large volume of these things coming and it's
11 a tough challenge for you I know to decide how to deal with
12 it in a way that will allow this transition to take place.

13 Thank you.

14 CHAIRMAN JACKSON: Thank you. Sam?

15 MR. COLLINS: I just want to state, I think the
16 Office's commitment to acknowledging that timeliness or the
17 paradigm wherein timeliness is different than it has been in
18 the past. We, by being in line with processes and business
19 decision, we implement actual business decisions and the
20 unregulated environment play, by no small means, a part in
21 the licensee's ability to conduct business efficiently. And
22 as stated here previously the efficiency goes to safety hand
23 in hand. I think our operating plans go to a large extent
24 to that, the discipline through the budget process that
25 we're trying to implement, but we are resource constrained

1 given what's on our plates, so we have to work smarter. We
2 have to work in a way that raises those priorities much to
3 the issues that have been mentioned here this afternoon
4 first.

5 So the question becomes, can we do that, do we
6 have the processes to do that, and the checks and balances
7 to ensure that it gets done? And my response would be, yes,
8 in some cases, and in other cases we're developing those.
9 We have had some successes and credit for license renewal
10 progress with Brian Grimes -- or Chris Grimes, excuse me,
11 and his crew and AP 600 with Ted Quay. It goes pretty much
12 in others to the staff's ability to act given the right
13 tools to do that with. And that includes oversight and
14 direction, but mostly decisionmaking discretion which is an
15 area that we have to continue to work on which, again, I
16 think, comes back to the overarching issue of how do we
17 provide for that? How do we monitor it, and how do we
18 surface those issues up to the line that need broad policy
19 decisions. I think that will be a continuing challenge for
20 us, but clearly working with the industry we need to be sure
21 that those issues that are on our plate are the most
22 important.

23 The most recent example of that is the elevating
24 of the importance of risk-informed tech spec amendments to a
25 high priority category two rather than the lower priority.

1 And that was brought about as feedback from NEI and the
2 industry about the progress of these initiatives given the
3 Commission's intent to provide focus on those areas. So we
4 went back and looked at our processes and they were not
5 commensurate with that direction. We have to do more of
6 that. I think we'll find other instances as we continue to
7 look.

8 CHAIRMAN JACKSON: Karen?

9 MS. CYR: I think there are a lot of lessons we
10 can take both from what we see in the industry in terms of
11 how they've gone about setting improvements for themselves
12 in terms of setting clear expectations, setting schedules,
13 holding people accountable for their actions and monitoring
14 actions that you set in place. Those apply in an
15 adjudicatory context. They apply in regulatory context in
16 terms of decisionmaking for processes and we're committed to
17 the Commission in terms of the regulatory -- the
18 adjudicatory process to take a look in the next few months
19 about where we may change or there are opportunities to
20 either change our regulations, or if not, opportunities to
21 change -- to go beyond that if we want to, to seek
22 legislation. And we will do that.

23 And we've helped provide the Commission in the
24 last few months some options for how within the existing
25 framework we think that they can monitor the adjudications

1 themselves to do some of these things in terms of setting
2 expectations and schedules. And so hopefully those will go
3 a long way in terms of trying to address some of the
4 immediate issues that we have before us.

5 CHAIRMAN JACKSON: Joe?

6 MR. CALLAN: Chairman, I really have nothing to
7 add to what Sam said. And I'll just -- I guess I would also
8 reinforce what Commissioner McGaffigan said about accepting,
9 as appropriate, the good enough standard and that will, as
10 you said, entail some degree of a culture change in the
11 staff. But there's only so much you can do with the process
12 and until you change that mindset, you're not going to make
13 the kind of breakthrough improvements that I think we're
14 talking about. So we understand that.

15 CHAIRMAN JACKSON: Thank you. Dr. Remick?

16 DR. REMICK: In preparing my remarks the last
17 couple of days, I went back over it and asked, where can I
18 expect the Commission is going to pin the tail on the donkey
19 and say, give me some specific examples. So on the bit of
20 timeliness I'll share with you some of the notes that I made
21 at the time, and some of the issues, the pilots I've already
22 referred to. But Part 50.59 improvements are certainly
23 languishing, the final guidance from the Commission on that.

24 The update guidance on USAR certainly is
25 languishing, the licensees out there are trying to comply,

1 but they don't know what the final guidance is going to be.
2 The Louisiana Energy Services hearing certainly was very,
3 very lengthy. The improved tech spec approvals certainly
4 are languishing, but why are these important to licensees.
5 And you have to look at it from the licensee standpoint,
6 that if they have initial classes of licensed operators
7 coming along, and this is a long, lengthy process of
8 training these people, do they get trained on the existing
9 tech specs, or do they get trained on the improved tech
10 specs. And if they go on that, that they're going to be
11 trained to the improved tech specs and the Commission does
12 not live up to the schedule, when these people are ready to
13 be examined for their license, it can be a disaster. You
14 can't change from one set of tech specs to the other after
15 people have been trained for many, many months on that.

16 The Part 52 reviews and much of the onus of that
17 is on the Commission on which I served as much as on this
18 Commission. And although I'm happy to hear that AP 600 is
19 moving along, certainly the two evolutionary plants and the
20 one -- I can't think of the -- the advanced plan, AP 600,
21 that is really an inordinately long process of reviewing
22 those applications and comparing what was done in this
23 Agency 20 years ago when there were just multiple, multiple
24 applications for plants.

25 Topical report reviews which was a problem six,

1 eight years ago, I'm told it's still a problem with very,
2 very low priority on reviewing and completing topical
3 representative reviews.

4 License amendment approvals also. The Generic
5 Letter 9606, this is the one that has to do with the
6 question of water hammer and containment air coolers and so
7 forth, they're still daily going out -- I shouldn't say
8 "daily", but I see occasionally RAIs going out which I can't
9 help but question, aren't these overkill questions that are
10 going out and are they just questions based on job security.

11 It's already been raised, the spent fuel cask
12 reviews, this is extremely important.

13 We mentioned the question of resource allocation.
14 I can't help but raise the question, is it still necessary
15 to have as many as five residents at one site in some cases?
16 And I'm not talking about Millstone. Is it really necessary
17 in this day and age to have as many as five residents at one
18 site?

19 The other matter I would like to talk about is the
20 ASLB process. And the reason I'd like to talk about that, I
21 have some prejudice or bias, I guess, because I served ten
22 years as a part-time administrative judge on the licensing
23 boards. And I guess I am defensive in a way inasmuch that I
24 really found that people serving on those boards at a time,
25 when there were many, many, many proceedings under way, were

1 trying to do the best job possible.

2 And after serving on there for ten years, then I
3 served as director of the Office of Policy Evaluation, a
4 small office that reported to five commissioners at the
5 time, and I sat at the Commission table just like the
6 General Counsel does at every Commission meeting.

7 And on several occasions frustrated Commissioners
8 asked why in the "H" are these licensing boards making
9 decisions for us out there? And because of my background,
10 and the Commissioners did not have that background, I was
11 able to point out, they're out there doing it for you.
12 You've delegated them that responsibility, you could
13 certainly do it. But there's no way physically you could
14 handle all of these proceedings. So you've asked this group
15 of people to hear these cases and come up with initial
16 decision which you can step in and modify if you wish.
17 Those people are trying to do a good job, but they are
18 receiving, and I felt this at the time, receiving absolutely
19 no direction from the Commission on what the expectations
20 were.

21 And so my advice on the hearing process is that
22 the Commission needs to stay in tune. They need to
23 establish expectations and schedules on what these
24 proceedings should be. You can't tell the licensing board
25 members how to decide, but you can tell them expectations on

1 timeliness and so forth. And as Karen mentioned, you can
2 monitor them closely, and you certainly have the authority
3 to reach down and bring things up for you to correct or
4 redirect and so forth.

5 Now, on the question of adjudicatory legislative,
6 certainly I personally would support more legislative-type
7 of hearings. I predict, however, it's going to be a very
8 touchy political question. There are a lot of people out
9 there who very much want that opportunity provided by the
10 adjudicatory hearings. I would like to see more legislative
11 -- Commissioner McGaffigan and I bounced around the idea a
12 few weeks ago of the Commission taking on the first license
13 renewal case and hearing it. And I told Commissioner
14 McGaffigan, if I was still on the Commission I would
15 probably be dumb enough to sign on and suggest that the
16 Commission do it. Because I applaud the intent of it, and
17 that is try to set an example of how the efficient process
18 could be handled for the first one.

19 But if it is an adjudicatory-type of hearing, I
20 think there is considerable risk that you might cause the
21 opposite. Because I think it will receive a lot of
22 attention, and nobody on the Commission currently has
23 administrative law experience, and, therefore, you're going
24 to be sitting as a Commission certainly with guidance from
25 legal counsel and so forth, but in a public eye, trying to

1 come up with collegial decisions on procedural matters which
2 you could easily make a mistake on, you can also look bad by
3 taking a long time to come to those decisions and to be
4 appealable in the courts, I presume, and so there is some
5 risk. I applaud the idea. I do support the idea. I would
6 like to see more legislative-type of hearings, but I must
7 admit, I predict there would be a lot of opposition to
8 changing from adjudicatory to legislative.

9 COMMISSIONER MCGAFFIGAN: On that one issue that
10 we did talk about, I should inform you and the public that
11 the Commission decided not to take --

12 DR. REMICK: I see.

13 COMMISSIONER MCGAFFIGAN: -- it to BG&E's, you
14 know, sighs of relief. We decided that we would not --

15 [Laughter.]

16 COMMISSIONER MCGAFFIGAN: -- do that.

17 DR. REMICK: You needed my vote.

18 [Laughter.]

19 CHAIRMAN JACKSON: Not in this instance.

20 DR. REMICK: I'm finished, thank you.

21 CHAIRMAN JACKSON: That's it?

22 DR. REMICK: Yes.

23 COMMISSIONER DIAZ: Okay. In the interest of
24 timeliness I think some of the concepts that come out which
25 can help us do things more timely is full consideration of

1 eliminating the zero factor. There's no such thing as a
2 zero factor. It's just an invention and its time is passe.
3 I think the elevation that "good enough" is fully acceptable
4 is something that we should seriously address and seriously
5 carry down, you know, all the way down to implementation.

6 I think that if we take these two things, both the
7 elimination of the zero factor and the elevation of the
8 "good enough" is fully acceptable and integrate it with
9 processes that discriminate from the beginning what the
10 priority are rather than looking at the process to make the
11 discrimination, that should accelerate, you know, a lot of
12 the licensing actions.

13 And then finally in the interest of timeliness
14 I'll say ditto to all of the above.

15 CHAIRMAN JACKSON: Thank you.

16 I think we've covered quite a full panoply of
17 issues today. But I would like to have, as they call it, a
18 "green-light session" to see if there are any other, you
19 know, issues that anyone would like to raise. Joe?

20 MR. COLVIN: Chairman, if I could pick up one last
21 comment on the rulemaking and timeliness or the timeliness
22 activities. There were two areas that were not raised and I
23 would be remiss if we didn't mention them. And I think
24 that's the recommendation to the Commission on a process to
25 decide on petitions for rulemaking in a timely manner that

1 have been issued to the Commission. When a petition for
2 rulemaking is submitted, it goes into some place and one may
3 never hear whether it's been accepted or not accepted until
4 some actual decision is made. And I think we've had
5 petitions for rulemaking pending for four or five years and
6 really don't know the status. And I think that that's an
7 area that would be an easy recommendation to take in effect.

8 I think the second issue has to do with the length
9 of rulemakings. And I know you've worked on this and tried
10 to come at other issues. But other agencies, and I would
11 use the FAA example only for illustration, when there is a
12 problem that is in fact a safety issue they pull together
13 the stakeholders, the engine manufacturers, the airframe
14 manufacturers, the operator and so on, put them in a room,
15 they solve the problem and the FAA issues an airworthiness
16 directive which I think falls into the order category which
17 is then implemented. And they do that in a fairly rapid
18 manner. So there are probably some examples like that I
19 would encourage the Commission and where they may need
20 statutory, and these may require legislative statutory
21 fixes, and I recognize that and industry would be pleased to
22 work with the Commission and support the appropriate changes
23 to provide efficiencies in the process.

24 MR. COLLINS: Chairman, I agree with the petition
25 for rulemaking issue. I think there's been one on QA

1 specifically that the staff has been wrestling with for a
2 period of time. That and the 2.206 process which David
3 Lochbaum has brought to us, I think are examples perhaps
4 where a focused review, perhaps Dr. Pate's concept, would
5 apply. I think it would be beneficial to sit down with the
6 stakeholders and carve those out, if you will, of the
7 overall issues that we're dealing with and try to pick those
8 processes off independently. And I'm willing to dedicate
9 resources to that because that -- and only after we improve
10 those processes will they start to bring good results.

11 CHAIRMAN JACKSON: Very good. Thank you.

12 Are there any other issues that anyone would like
13 to raise?

14 MR. COLVIN: Chairman, I have one other point. I
15 don't want to belabor the conversation, I wanted to just
16 enter and give to you the Commission, we have a two-sided
17 sheet of paper which has eight specific recommendations,
18 many of which we have talked about today.

19 CHAIRMAN JACKSON: Okay.

20 MR. COLVIN: And I just wanted to provide that,
21 and there are copies that will be provided for the other
22 parties.

23 CHAIRMAN JACKSON: Thank you very much.

24 Anyone else?

25 COMMISSIONER McGAFFIGAN: Madam Chairman, just one

1 point. Obviously what provoked this discussion more than
2 anything was the language from the Senate Appropriations
3 Committee and I think it's been very useful and we obviously
4 have things we need to do to improve. I would prefer -- I'd
5 just state to this group that I don't know that cutting
6 resources -- and I had a conversation with Dr. Remick about
7 this -- cutting resources is a very blunt instrument and it
8 doesn't necessarily lead to the improvements we're all
9 desiring. It may well be that if we fix all these processes
10 we need fewer resources. But at times fixing the processes
11 requires resources up front. So I would just make that
12 point.

13 The Commission also, on the issue that I think was
14 most -- and maybe I should defer to the Chairman on this,
15 but the issue that was of most concern to the industry, the
16 fairness and equity issue, I think we -- why don't I just
17 turn it over to you and let you say whatever you want there,
18 but we have responded.

19 CHAIRMAN JACKSON: Yeah, let me take that up and
20 then let me talk to the resources issue.

21 I that in fact -- I mean the Commission made a
22 decision and our original timeframe was for the FY-2000
23 timeframe, but in fact we're prepared and certainly willing
24 to propagate it into FY-99 to address the issue of fairness
25 and equity of fees by looking to take off of the fee base

1 those activities that have less direct connection to the
2 activities of our domestic licensees. And the Commission
3 decided on a percentage formula up to 10 percent to come off
4 of the fee base -- 10 percent of our current budget.

5 There are various proposals, but one in particular
6 that I'm sure will be discussed at an authorization hearing
7 we'll be having at the end of the month that's arisen in our
8 authorization committee that would take up to, I believe,
9 \$30 million off of the fee base, and we've said that we
10 could work with that, although there are some procedural
11 things that we've been talking with the committee about.
12 And so -- I mean, that's an issue that has been around and I
13 think that -- in fact I particularly congratulate my
14 colleagues in this regard and then one member of my staff in
15 working out a formula for how that could work. And the
16 member of my staff is Jackie Silver who I don't think is
17 here. But I think all of us worked to try to come up with a
18 reasonable approach recognizing what the issues are and that
19 we needed to address this forthwith.

20 And on the resources issue, I would like to come
21 at it this way, I'm sure many of you have had experience,
22 perhaps much more than some of us, in managing your
23 enterprises and you make various decisions relative to
24 streamlining and downsizing and what needs to happen. But
25 in the end that comes out of a set of decisions having to do

1 strategically with where one wants to go, what the strategic
2 focus and positioning of your enterprise needs to be, and
3 that what downsizing decisions are made are made in a very
4 deliberate fashion that ends up having to balance, you know,
5 what needs to go out the window with what needs to perhaps
6 come in the window.

7 And Commission McGaffigan has already spoken to --
8 in order to carry out these new -- a number of these
9 corrections themselves require resources, speaking of
10 deployment or redeployment of resources and that is
11 certainly true, and I was going to speak to that at any rate
12 in a minute. But in the end that implies there are
13 resources to be deployed. At the same time the Commission
14 has been pressing the staff very strongly on issues related
15 to timeliness and efficiency. I won't tell you some of the
16 things that Commission McGaffigan really presses the staff
17 on in terms of trying to be more efficient in how we use our
18 resources. And I have worked very closely with the
19 executive council in particular to develop a budget and
20 planning and performance management framework and to squeeze
21 and to think about how we can use in a very smart way the
22 resources we have including redeployment of people as
23 necessary.

24 What one would not like to risk is to lose faith
25 with the staff in carrying out these processes that as we

1 demand that they become more business-like in their focus,
2 more efficient in their use of resources and squeeze money
3 out of the budget. And believe me, we are continuing to do
4 that. That, in fact, people feel they are penalized for, in
5 fact, exposing more of how they in fact manage their shop.
6 And there are any number of vulnerabilities and improvements
7 that can be made, but I think it's very important that the
8 staff be able to manage those processes down with clear
9 guidance and direction from the Commission. And I think we
10 feel very strongly about that. And so I thank Commissioner
11 McGaffigan for bringing that up.

12 Now, all of that said, let me thank particularly
13 our invitees, Mr. Earl Nye, Mr. Joe Colvin, Mr. Corbin
14 McNeill who had to leave, Dr. Zack Pate, Mr. Harold Ray, Mr.
15 David Lochbaum, Dr. Remick, a former commissioner, as well
16 as my colleagues and the NRC staff, and all of you who came
17 out today for your participation in, and/or interest in this
18 round-table meeting. I hope that you in fact have felt that
19 it has been a round-table discussion. Notwithstanding the
20 geometry of the table.

21 [Laughter.]

22 CHAIRMAN JACKSON: And I will state on behalf of
23 the Commission, and I hope you've seen this in the
24 discussion today that we recognize the challenges before us.
25 And we in fact embrace a movement to improvement in how we

1 do our business. And I want to reassure the public, in
2 particular, that the Commission remains committed to
3 maintaining our focus on our primary health and safety
4 mission. In the end that is what we are here for as we
5 continue to improve our oversight of nuclear programs along
6 some of the lines we've been discussing today.

7 Now, of particular interest to me today, and I'm
8 going to try to see how well I've captured. Unlike our
9 totally choreographed Commission meetings, this one is a
10 challenge in terms of capturing, as we've gone along, the
11 essence of what we've discussed. But I think of particular
12 interest were the discussions regarding issues of management
13 within the NRC and the timeliness of NRC activities, the
14 insights on risk-informed regulation, the need for
15 adjustments to our inspection or reworking of our inspection
16 process, and pointing out some of the abuses of regulatory
17 process at the site interface; reworking and ensuring the
18 proper focus in our inspection program; and in particular I
19 think -- I and the whole Commission is in interested in
20 ensuring that all of these functional areas of NRC fit
21 together in a logical cohesive framework for regulatory
22 oversight. And let me see if I've captured some of the
23 points of concern.

24 This is probably not comprehensive, but I would
25 say in the management arena there were examples and

1 discussions of lack of clear direction. On one hand a lack
2 of oversight of field personnel in certain instances as I
3 talked about particularly in the inspection area, but on the
4 other hand the need to empower the staff in order to be able
5 to move along on some of these joint initiatives. And
6 overall a need for cultural change in order to move from
7 where we've been to a truly risk-informed regulatory
8 framework. There's the need for the Commission itself to
9 satisfy itself that it understands what's going on in the
10 field with respect to its direction and how the practices
11 are carried out in conjunction with Commission procedure.

12 There are any number of comments made on the
13 assessment and enforcement and inspection areas
14 specifically, but the NRC does look to validate its
15 assumptions about licensee performance. But we've heard
16 that a number of our enforcement actions, for instance,
17 frequently are not focused on what is safety significant and
18 can serve unwittingly the misdirected purpose of
19 misdirecting licensees' attention. That there is a burden
20 that we place on our licensees for relatively low-level,
21 non-safety significant violations and we need to look at
22 that.

23 In the overall area of regulatory excesses we've
24 heard repeatedly about inspector mischief, about our use of
25 informal means such as confirmatory action letters or

1 generic communications to de facto create regulatory
2 requirements and that we get in our own way at times by
3 focusing on perfection versus what is adequate or good
4 enough.

5 In the timeliness area, there are issues having to
6 do with boundaries and barriers to interactions between the
7 various parties. We've talked, there were a number of
8 specific areas but focusing on the adjudicatory process, et
9 cetera.

10 Now, Mr. Nye spoke of a "to do" list and I've
11 tried to capture some of the "to do"s and then if there are
12 any that any others feel we need to specifically focus on, I
13 would welcome your giving us that input.

14 I think we need to work on our working
15 relationships on the various initiatives to have the right
16 working groups to be more open in terms of how we work with
17 our stakeholders to move along on these initiatives and
18 create within those relationships the means to break log
19 jams immediately.

20 There's the need to bring to closure certain
21 specific initiatives. We've talked about the results of
22 some of the pilot programs. In particular in-service
23 inspection we know is an important one as well as the others
24 that have traditionally been talked about.

25 I think we ourselves can ask how can the -- we can

1 ask you, and I think we have, what can we learn from the
2 industry in terms of developing our own get-well approach.
3 I mean, we always talk with the industry about the need for
4 clear objectives, the need to have a management team focused
5 on achieving those objectives, and then to have people
6 actually working on getting the work done.

7 There was a specific recommendation to convene a
8 high-level assessment group and Commissioner Diaz pointed
9 out, I think, rightfully so, that one needs to be sure
10 there's fresh blood in that group, folks who are where the
11 rubber meets the road, but that this -- the Commission needs
12 to be clear on what the objectives of such a high-level
13 review would be and it needs to have the full Commission
14 buy-in and the EDO's endorsement. And it perhaps needs to
15 look at some of the more fundamental precepts and concepts
16 but since what fundamentally we're talking about here
17 largely involves looking at what we do in our reactor
18 regulation program, I think it is very important that we
19 understand how any new assessment or review would play off
20 of the existing assessments. And Sam talked about various
21 ones, and I'm sure coming out of Congressional concerns
22 there may be yet other assessments that get done. And in
23 the end we have to look at the tradeoff between studying
24 things to death and getting things done. And I know that
25 Sam and his folks are working very hard and are feeling

1 pretty overwhelmed at this point.

2 With respect to timeliness, I think we know where
3 we are on the adjudicatory issues. I think there are some
4 more innovative approaches that may require some legislative
5 help, but at the same time we are where we are and we're in
6 the middle of some important processes that have
7 adjudicatory aspects, license renewal obviously being a big
8 banana, but at the same time the reality that a number of
9 you have spoken of, of the reorganization of the industry --
10 nuclear power industry pursuant to deregulation and that
11 there will be any number of license transfers. And our OGC
12 has offered us a number of options which the Commission is
13 probably going to try to adopt as many of them as we can for
14 moving things along.

15 And recently, Commission McGaffigan had raised the
16 issue of -- and I'd ask Karen specifically of looking at
17 with respect the license transfers what kinds, do we have
18 any flexibility on the kinds of hearings that we might have.

19 The point has been made that we need to give more
20 management attention to speed processes that we need to
21 redeploy resources into areas where the high priority work
22 needs to be done, that we need to particularly perhaps we
23 could use a focus to review with respect to how we handle
24 petitions for rulemaking as well as 2.206 petitions and that
25 we can learn things from other agencies such as the FAA by

1 looking at things like the length of rulemaking.

2 And so in closing let me sort of leave a couple of
3 thoughts. There were a couple of times that the statement
4 was made that the staff always wins. And I think that I
5 would not like to have us leave this meeting with any kind
6 of pejorative statements or implication relative to the NRC
7 staff. The NRC staff works very hard to carry out its
8 regulatory mission. That it feels it is very strongly
9 focused on safety, that we have managed to license over 100
10 currently operating nuclear plants, they have been safely
11 operated. The responsibility for safety rests with those
12 who own and operate the facilities, but I think we at the
13 NRC believe that we've had a strong hand in the safety
14 record of that industry, but particularly the NRC staff.

15 There have been any number of normalizations that
16 have been made along the way in response to not only
17 industry, but Congressional to GAO and other stakeholder
18 concerns and reviews, some with unintended consequences
19 perhaps. For instance, the issue of the severity level four
20 violations and their increase, but growing out of a desire
21 and an attempt to be more consistent in how things are done,
22 activities taken pursuant to the situation at the Millstone
23 Nuclear Power Plant.

24 Ironically I believe that there's always a silver
25 lining because a benefit has been that along the way what

1 we've done is to expose what really have been festering
2 problems in terms of, for instance, how we handle
3 enforcement, the tie of our enforcement actions to risk and
4 safety significance, and these things predated the specific
5 run up of severity level four violations recently, and
6 predated any number of other things. But nonetheless, it's
7 clearly on the table.

8 Joe spoke circumspectly about some things that we
9 are considering, but they do have to come to the Commission
10 for the Commission's decision.

11 Similarly, growing out of our experience which
12 none of us would like to repeat with Millstone, the whole
13 issue of finally doing a rulemaking on 50.59 where we get at
14 this issue that Commissioner Diaz spoke eloquently about of
15 getting rid of -- of recognizing that the zero is not zero
16 anyway. And it doesn't make sense. And looking at issues
17 of the safety analysis reports and how they are handled,
18 even though I agree, we need to get the guidance moved
19 along.

20 So we have initiatives under way. And what we are
21 in the process of doing is culling through, you know, what
22 we think is working, what is not working, and what needs
23 fundamental change. And I think that our discussions today
24 are going to contribute very strongly to that. And there
25 are a number of thoughtful proposals that have been placed

1 on the table and thoughtful communications such as the NEI
2 proposal on risk-informed oversight, others, there are some
3 petitions for rulemaking as well as communications we've
4 gotten from various individuals. What we have to do then is
5 to engage with our stakeholders, engage with the industry to
6 work through them in an expeditious manner.

7 We do have a planning process which we hope will
8 help us to accommodate change whether it's -- as I've talked
9 with the staff about -- a modulation of trajectory or a bend
10 in the road, but as I've also told them that a bend in a
11 road is not the end of the road unless you fail to make the
12 turn. So in the end communications is the key.

13 And I hope that the discussion today has helped us
14 to take a step along the road of better communications, but
15 more importantly, through the communications to rectify what
16 have been these long festering issues. And I think the
17 Commission and all of us are committed to that. And we may
18 have differences of opinion on any number of things, but I
19 think that we're all committed to making progress in these
20 areas and making it forthwith.

21 So unless there are any further comments, we are
22 adjourned.

23 [Whereupon, at 2:00 p.m., the meeting was
24 concluded.]
25

CERTIFICATE

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

TITLE OF MEETING: PUBLIC MEETING ON STAKEHOLDERS'
CONCERNS

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Friday, July 17, 1998

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

Transcriber: Rae Guehen

Reporter: MARK MAHONEY

Change in the Regulatory Process

- The Need for Objective Priorities throughout the Regulatory Process
- The Dissipation of Resources on the Easy at the Expense of the Difficult
- The Importance of Consistent Policy Directions ~~to~~ Change

Change in the Regulatory Process (cont'd.)

- Safety and Compliance Can Be Demonstrated to Be Congruent
- The Quest for Perfection in Process is the Enemy of the Assurance of Adequate Safety
- Latent Regulatory Ambiguity Must Be Addressed

A New Challenge for the Regulatory Process

- A Majority of Licensed Power Reactors Will Not Be in Cost-of-Service Rates within Five Years
- Sale or Transfer to Non-Electric Utility Owners Will Accelerate
- NRC Actions to Prepare for this Change Need to Continue and Expand

RECOMMENDED NEAR-TERM REGULATORY IMPROVEMENT ITEMS

1. NRC needs a new **Plant Assessment Process** that:

- Accurately and objectively measures the safety performance of nuclear power plants through quantitative metrics.
- Accurately communicates the safety performance of nuclear power plants to the public and other stakeholders.
- Permits informed analysis and assessment of safety performance.
- Provides actionable thresholds to distinguish when licensee action is appropriate and when regulator action is appropriate.

2. NRC **Enforcement Policy** needs an improved safety focus.

- Increase in violations is inconsistent with improving industry safety performance.
- Violations of low safety significance consume NRC and industry resources.
- Minor discrepancies should be documented in inspection reports and treated as an inspector followup item.

3. Expedite **Risk-Informed/ Performance-Based Regulation** activities.

- The nuclear industry shares NRC's vision of moving forward with this approach.
- Current NRC staff approach is too slow, creating a reluctance by industry to invest resources in this area. Two examples are:
 - * It took the staff over 4 years to issue regulatory guides for ISI, IST, and graded QA – all were obvious improvements in safety and efficiency.
 - * Industry proposed "whole-plant" risk study is in jeopardy of being cancelled because the NRC staff is unable to act in a timely manner on even the simplest proposed item to extend post-trip hydrogen sampling times.

4. NRC needs strict **Application of the Backfit Rule**.

- NRC staff routinely impose new, individual interpretations without applying the backfit rule.
- The discipline provided by the backfit rule should be applied to decommissioning issues and reflect the reduced risk posed by plants in a defueled condition.
- NRC should not include Averted On-Site Costs in its regulatory analysis under the backfit rule. Averted On-Site Costs involve avoidance of potential economic losses for the licensee. This is a business issue and should not be regulated by the NRC.

5. **NRC Communication to Licensees** should reflect senior management direction and policy.
 - Management does not exercise its responsibility to control individual interpretations of regulations that differ from established positions.
 - Requests for Additional Information (RAI) frequently solicit commitments that exceed established positions.
 - More accountability has to be provided in management oversight. Simply lengthening the already long concurrence chain without adding value is not the answer.
6. **NRC needs to conduct a Task Analysis of Work Processes** to improve its lack of timeliness and ineffective use of resources.
 - NRC takes an inordinate length of time to process licensing actions, complete enforcement activities, and promulgate rulemakings. Examples include:
 - * 3 to 4 years to certify dry storage containers;
 - * 10CFR 50.54(a) rulemaking petition regarding QA program change, which has been under consideration since Spring 1995;
 - * Shipment of a reactor with its internals has been under review since March 1997.
 - An independent task analysis could eliminate unnecessary, low-value steps in processing work and greatly improve timeliness and efficiency.
7. **NRC should stop Duplication of Effort.** Examples include:
 - Industry has effective programs for evaluating events and compiling performance data, which NRC does not need to duplicate.
 - NRC should make more use of licensee self assessments by reviewing the results rather than conducting redundant inspections.
 - Make more use of industry guidance and standards under DSI-13.
8. **NRC needs to expedite Certification of Dry Storage Containers.**
 - Twenty-five plants will lose full core offload capability by the year 2000 if they cannot expand pool storage or use dry storage technology.
 - Container certifications take 3-4 years.
 - Commission needs to ensure the one-year goal for certification is achieved.



PERCEPTIONS OF THE NRC TODAY

Presented At

NRC STAKEHOLDER'S MEETING

In

Rockville, Maryland

By

Dr. Forrest J. Remick

17 July 1998

I am pleased to be invited to your Stakeholders Meeting to discuss perceptions of some of the issues that face the NRC and the nuclear industry today. I must admit that I debated accepting your invitation. After all, I wasn't sure who would be swinging the sledgehammer at the stake I was to be holding, and I wasn't sure if I was to be a stakeholder in the nature of Joan of Ark. Seriously, I'm pleased that you are holding this meeting and to have been invited

I've had a variety of interactions with this agency and its predecessor over the past 42 years. I was a licensee and a licensee's representative for many years. I've been personally responsible for two Part 50 licenses, several Special Nuclear Material (SNM) licenses, and several special Byproduct & Broad Byproduct Material Licenses. I've consulted for a number of licensees and worked for the International Atomic Energy Agency (IAEA). I was a consultant operator license examiner for the AEC and the NRC for 14 years; served as a part time Administrative Judge on the Atomic Safety and Licensing Board (ASLB) for 10 years; was a member, vice-chairman, and chairman of the Advisory Committee for Reactor Safeguards (ACRS) for more than 7 years; served as Director of the Office of Policy Evaluation (OPE), reporting directly to the Commissioners during 1981-82; and, served as a Commissioner from 1989 to 1994. Further, I have interacted with a number of you and with members of the staff on a regular basis and I watch your activities fairly closely

I mention this not in an attempt to impress you, but to indicate that I believe I bring a somewhat unique perspective to the meeting. I have seen the agency extensively from the inside and from the outside. I feel very much at home in this agency and with its people. I have the highest respect for the NRC, its important mission and its people; but, I also have some differences and concerns about the agency's direction and its future.

There are a number of things that I considered saying to you today but I believe others at the table might best address many of the points. However, there are some things that maybe I am in the best position to say. Therefore, I wish to share with you some perceptions of the NRC today. Many say that perceptions are reality, although I don't always fully agree with that generality

To conserve time, I will go to the bottom line in a direct, perhaps blunt, manner sharing with you what I see from my perspective. And when I say you, I mean the agency in general. However, because of my past relationship with the NRC, it gives me some discomfort and pain to be so blunt in a public forum. But, I take your interest in hearing from your stakeholders as sincere. Further, to the best of my knowledge, I have no ox that might be gored. My comments are meant to be constructive and are provided with respect for you and your positions.

Much of what I read that you say as a collegial Commission, I can agree with. But to be blunt, the Commission does not know in detail how the agency's programs are being performed in the field. And after all, it is said that "Performance is, what performance does"

You have lost some credibility and are losing credibility on the Hill. You are being seen more and more as an agency with problems; thus, you are being seen as a problem agency.

The overemphasis on blind adherence to strict compliance with confusing regulations and strict compliance with documents never intended for that purpose is, in some cases, diverting plant personnel's attention from more safety-related activities. Directions to the staff to write-up anything they see that appears to be wrong, whether or not it falls under the regulations, is not only questionable, but wasteful. It is my fear that rather than maintaining or increasing nuclear power plant safety, this trend may be resulting in reduced attention to safety. As a result, you are losing credibility with many of your licensees who, in return, are losing respect for the agency and its regulatory process.

You are seen as having lost focus and perspective on what constitutes safety and adequate protection and are striving to duplicate industry's initiative of seeking excellence in plant operation. You speak of striving to be risk informed and you speak of the need for performance based regulatory implementation, but little impact is seen in the field. In fact, there appears to be great reluctance to accept risk informed insights as justification for considering change. Further, you are seen as neither being fully committed to the various pilot programs that have been undertaken or are underway nor implementing or taking advantage of the results.

The Commission is seen as a highly bifurcated body, not a unified collegial body. Rumors of infighting are rampant, both internal and external to the agency. As a result, many of the staff are perceived as being hunkered down and afraid to make decisions, and reviews and decisions are seen to languish, with numerous further Requests for Additional Information (RAIs) used as delaying tactics. This, I believe, is the basis for industry's legitimate concern over timely License Renewal reviews. The morale of some staff is low, and a number are seen as biding their time to retire or wait for change. The agency has lost much technical expertise and regulatory knowledge and memory.

The agency is highly intrusive into the day to day activities of licensees. Little, if any, change or relief is seen based on improved plant safety and operation. For better, but also for worse, this intrusiveness in large part drives what goes on at the plants on a day to day basis. The intrusiveness is largely based upon highly subjective criteria which NRC residents, and regional and headquarters personnel would like to see done at the plants, frequently with the best of intent. But finding the relationship to public safety, or to the Commission's regulations is frequently difficult to see. The influence of and the discipline prescribed by the Backfit Rule (Part 50.109) is not evident in this subjective ratcheting.

The influence of subjective SALP ratings, or of subjectively being placed on the "Watch List" play a large part in what drives many day to day activities at plants whether or not the activities have a safety nexus. The subtle threat or fear of adverse SALP scores or being placed on the "Watch List" are an effective means of getting licensees to make

changes that the staff wants. Many such changes would not meet the criteria of the Backfit Rule or be solidly anchored in the Commission's regulations.

For example, the use of Confirmatory Action Letters (CALs) has grown by leaps and bounds recently. These are viewed as a technique to obtain changes that the staff wants done while getting around the Backfit Rule, the regulations, and the Commission. If you doubt this, I urge that you read all the CALs issued in recent months and ask the following about the actions being "confirmed":

What is the relative safety significance of the individual actions being "confirmed"?

Are the actions, in effect, new requirements?

Where are the actions specified in the regulations?

Do the actions meet the criteria of the Backfit Rule?

Is the letter truly "confirmatory", or has it been previously written and is being imposed?

If the actions being "confirmed" are not safety significant or not specified in the regulations, what place do they have in a Confirmatory Action Letter? It would also be an interesting exercise for you to read a large sampling of Inspection Reports or sit-in on inspection exits and ask some of the same questions about matters being addressed.

I think that I have shared more than enough perceptions to help kickoff this discussion. Much of what I've said I'm sure you've heard before. What is important is what you in the agency do about it.

I close by saying what I have said before in various fora: The industry wants and needs a strong NRC which is creditable to the public. The NRC is not a perfect agency; however, it: is the strongest nuclear regulatory body in the world; is highly respected throughout the world; and, is one of the best, if not the best, technical agency in Washington. However, it can and should be improved.

Further, nuclear energy is important to this country, it: is important for assuring an adequate energy supply and mix; is important for national security; and, is important for public health and the preservation of the environment.

It is inevitable that there will be a resurgence of the need for nuclear power in the US. However, for nuclear power to be available to meet this nation's needs as Congress has directed:

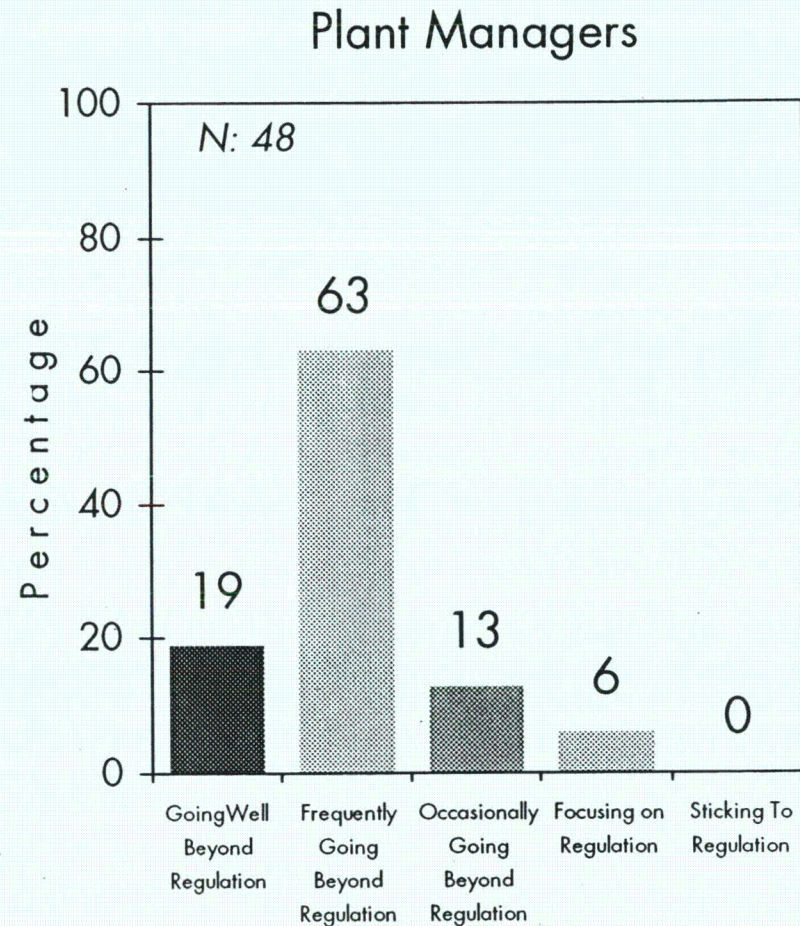
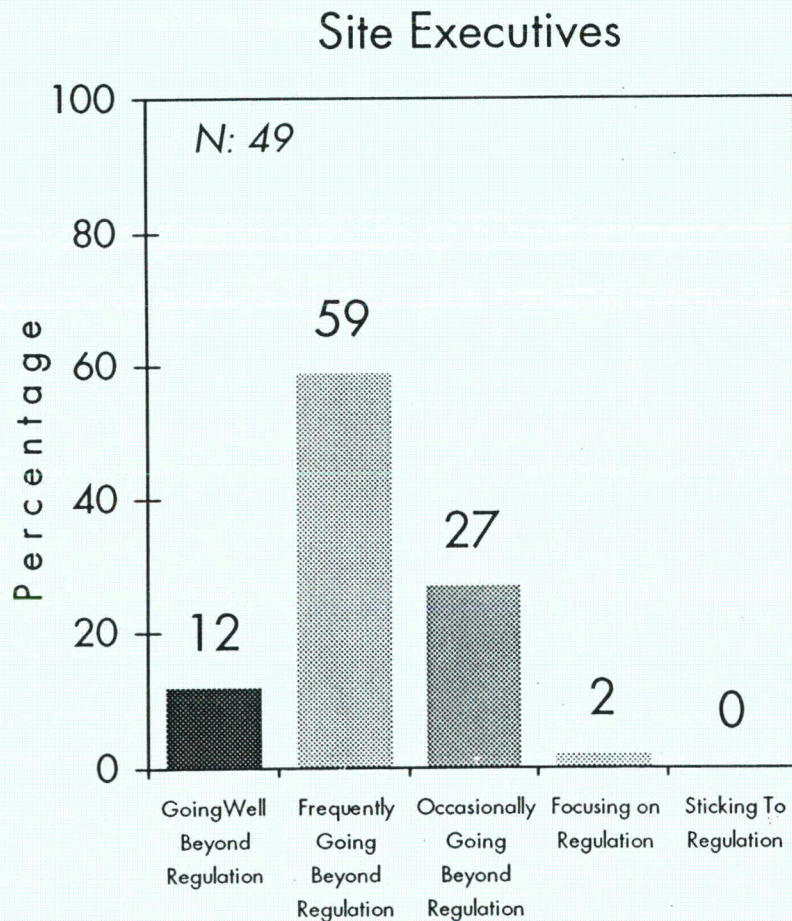
- ♦ The multiple layers of stakeholders (i.e., Congress, the NRC, industry executives, plant management and plant employees) must work in concert to accomplish effective change.
- ♦ Licensees and the NRC, who are in this important enterprise together, must find ways to work together in an above board, professional manner which is less confrontational, adversarial and punitive.

- ♦ With restructuring underway, utilities have undergone and are undergoing change.
- ♦ The NRC must change its manner of doing business, and the time is ripe for it to change.
- ♦ The NRC must become more efficient.
- ♦ It must complete its reviews in a more timely manner.
- ♦ It must bring its regulations up to date with the knowledge, experience and techniques available today.
- ♦ It must become more objective.
- ♦ It must cease to waste its resources and those of its licensees through the use of subjective criteria.
- ♦ It must regulate wisely to its regulations; not to a subjective search for licensee excellence, which is industry's job.
- ♦ However, the NRC should seek excellence in all that it does.

Thank you for the opportunity to share some of my perceptions with you today in the interest of an improved regulatory process.

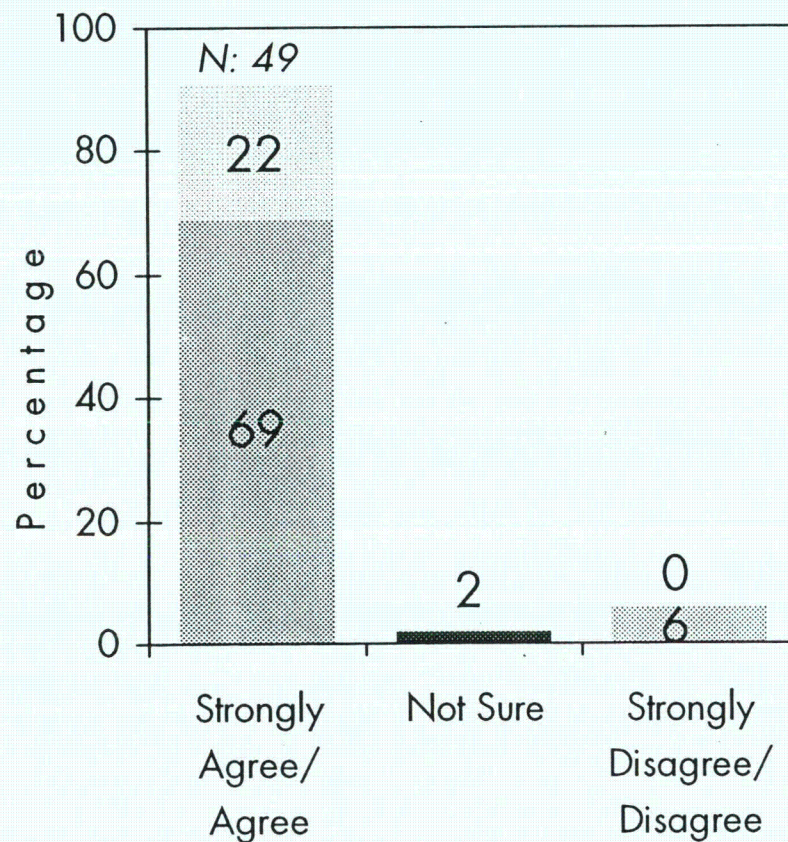
**Extracts From
Appendix E
To
Towers Perrin
Report**

9 Reflecting back over the last three years, your assessment of NRC regulatory activities is that the regulator is:

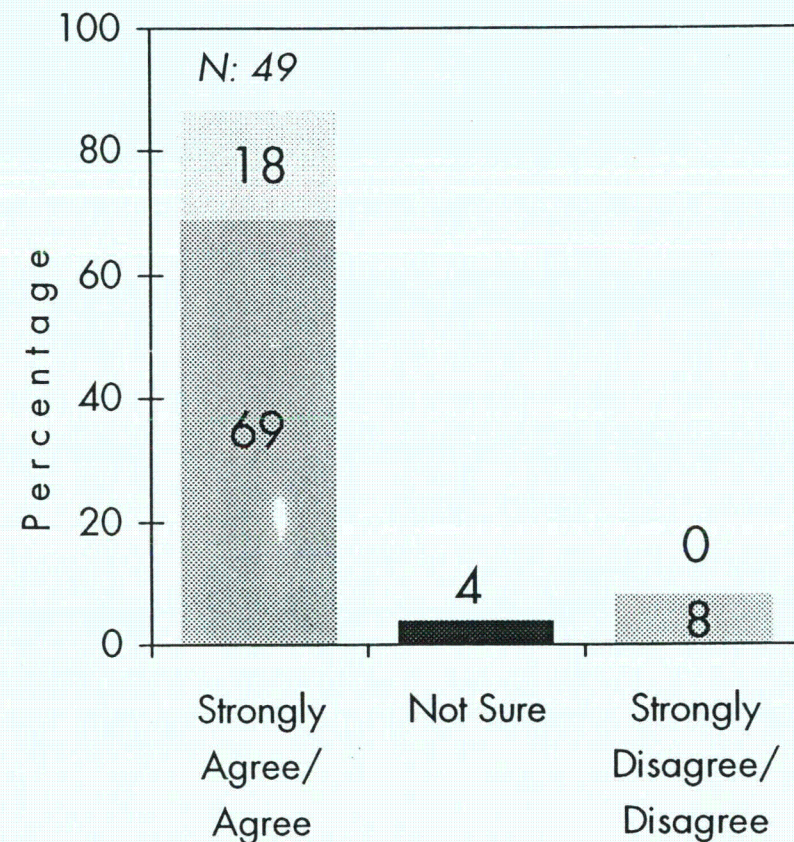


13 (f) NRC non-statutory initiatives such as Bulletins, Generic Letters, and Confirmatory Action Letters result in utility regulatory commitments that go well beyond regulatory requirements.

Site Executives

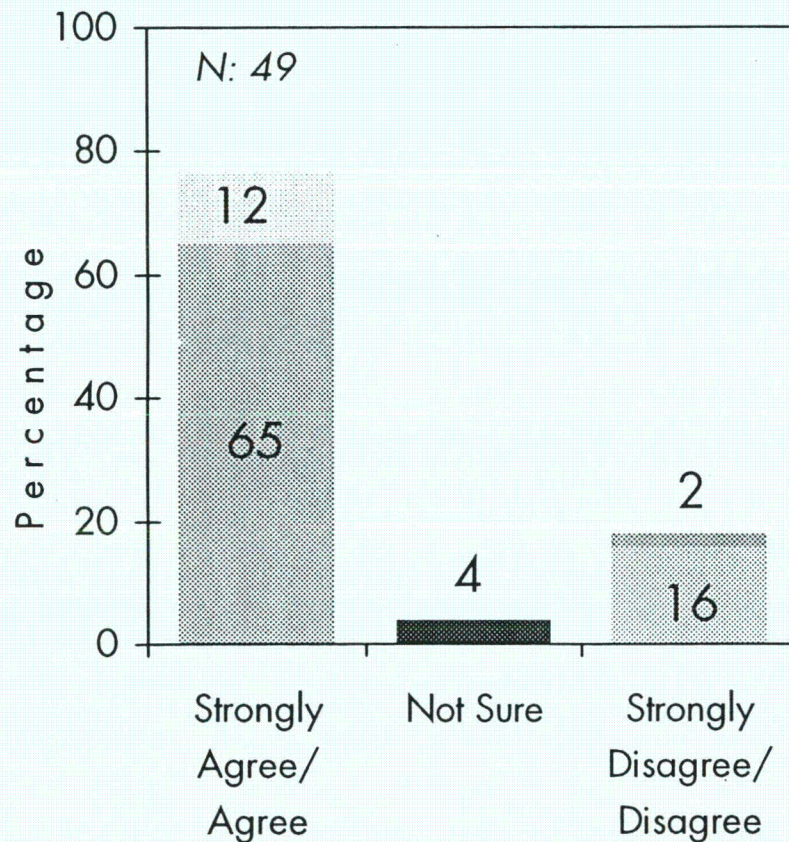


Plant Managers

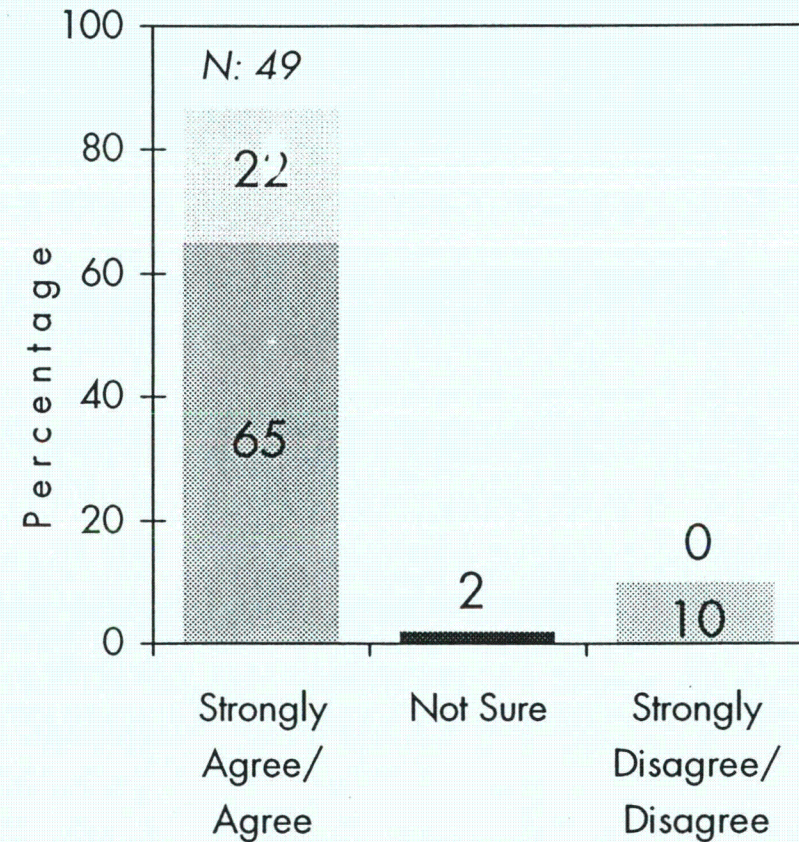


13 (b) NRC inspectors have used inspection reports as a way to exert pressure to follow suggestions that have little or no safety value.

Site Executives

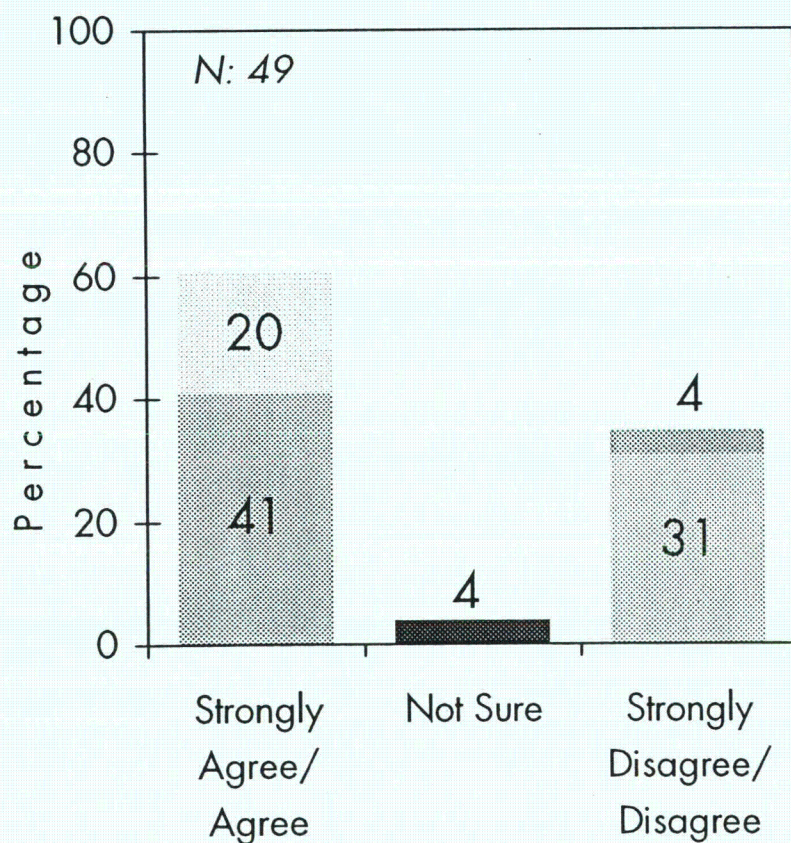


Plant Managers

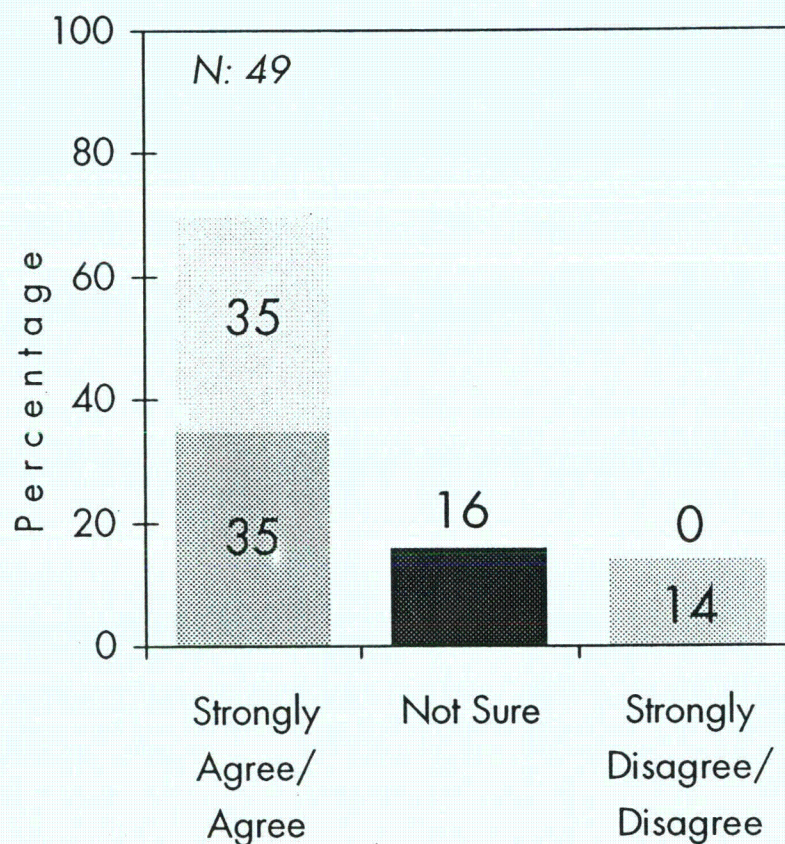


13 (e) The NRC, particularly at the Region level, has gone well beyond existing regulations to influence plant actions based on a subjective view of what constitutes proper management.

Site Executives

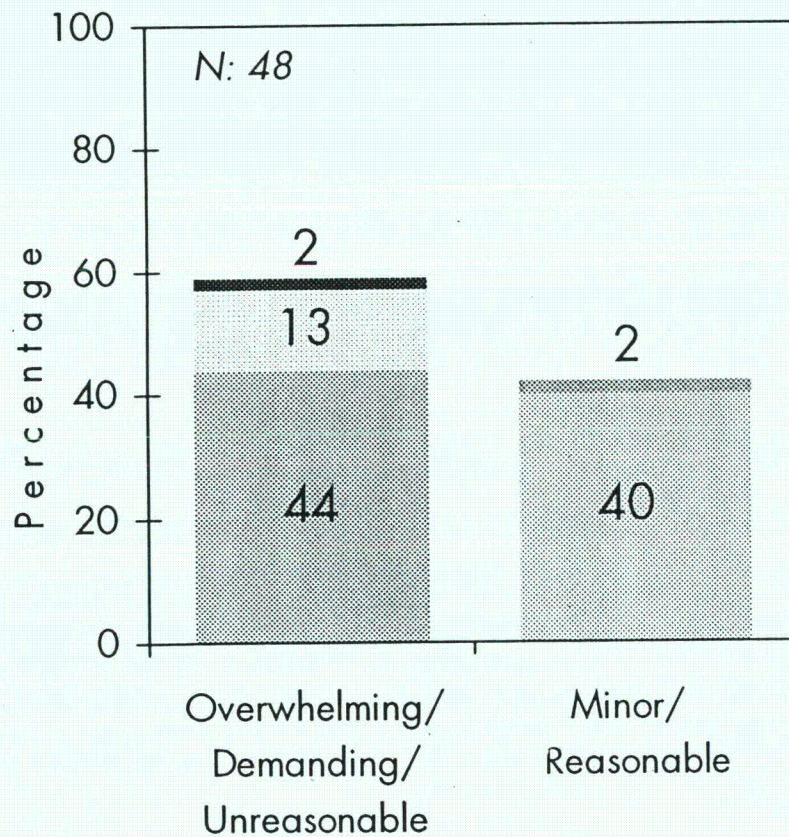


Plant Managers

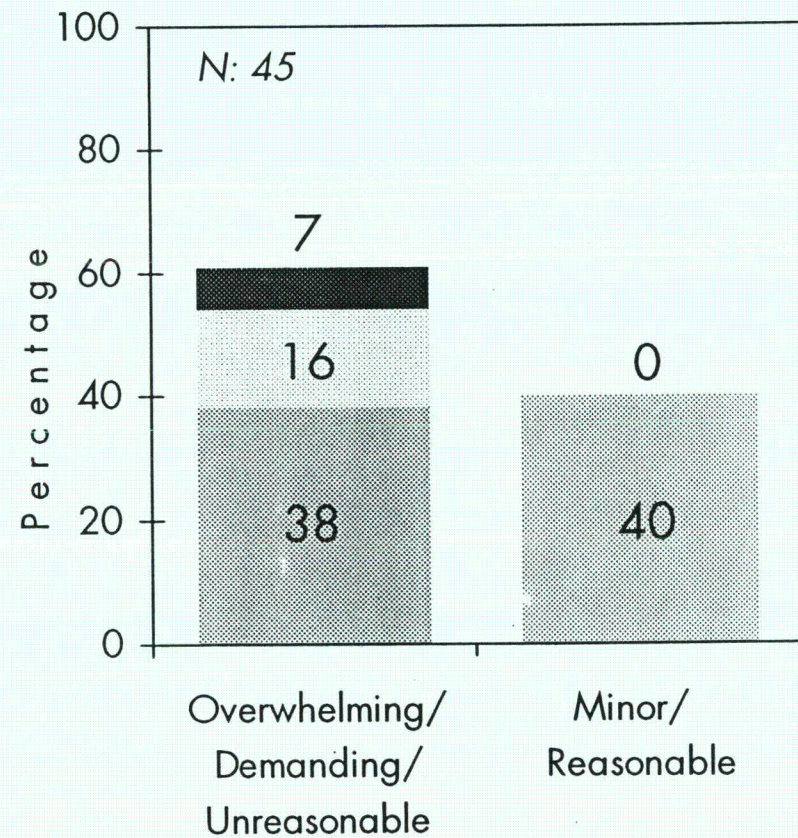


11 Impact of regulatory pressure by the Region to take action not required by regulation:

Site Executives

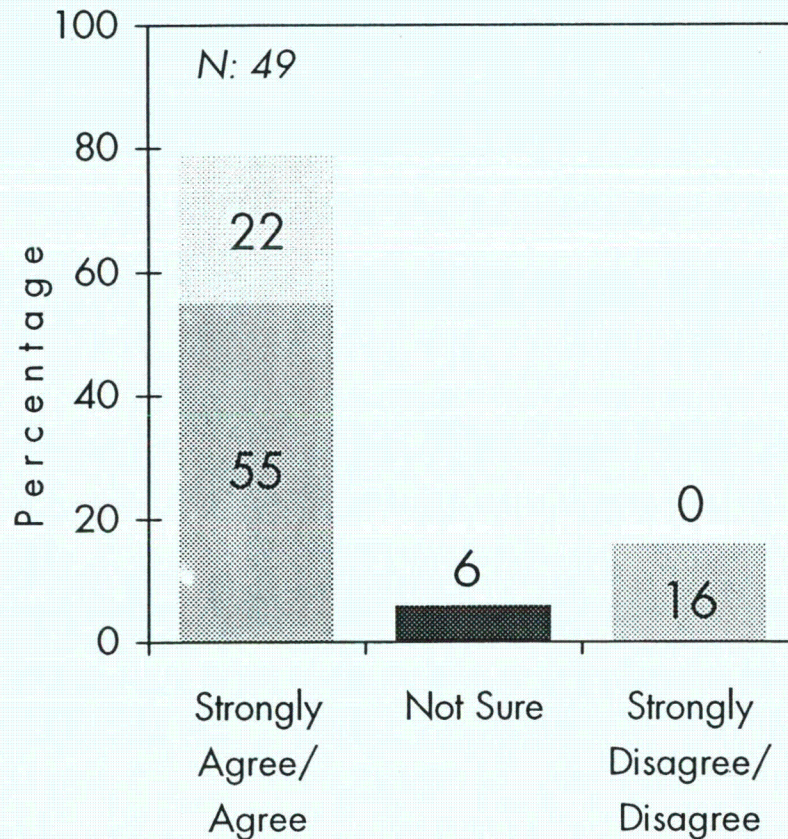


Plant Managers

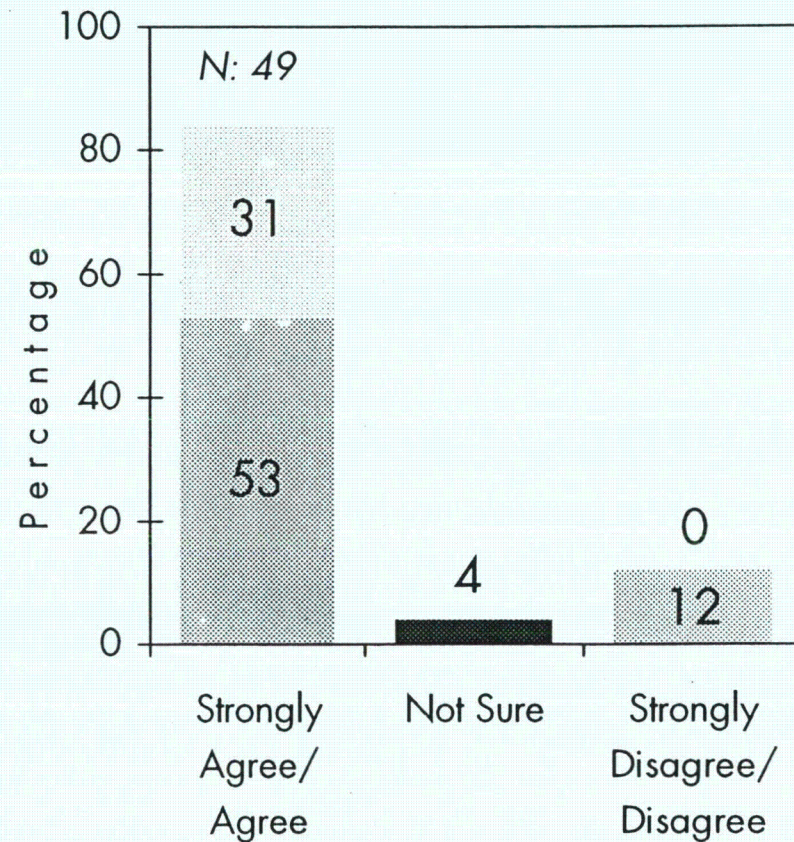


13 (a) Pressure from the NRC to take action on issues of little or no safety value has unnecessarily contributed to significant plant operating costs.

Site Executives

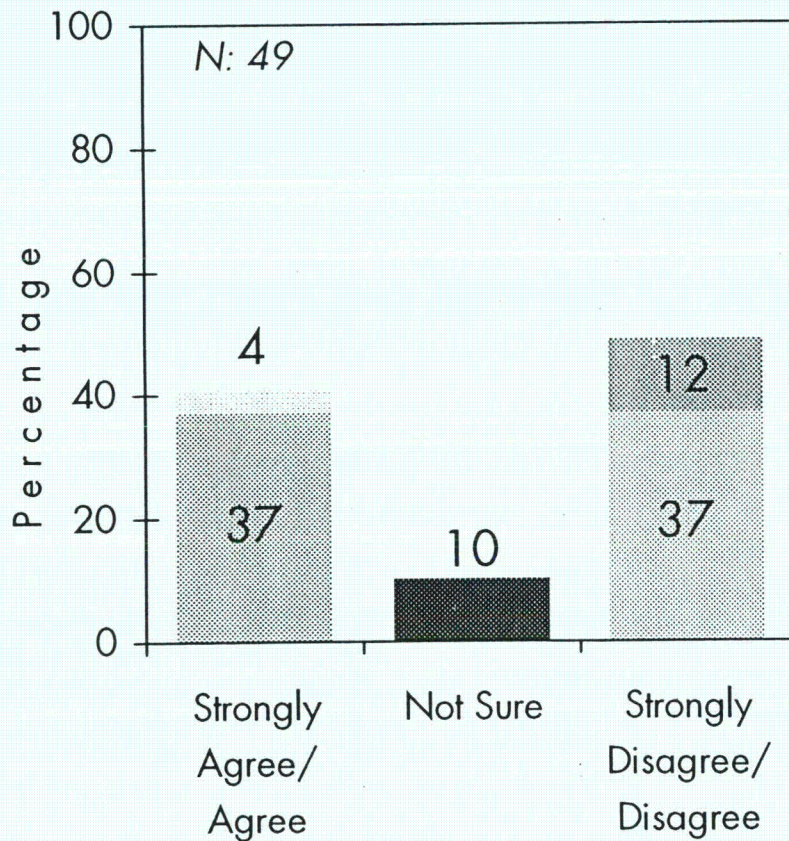


Plant Managers

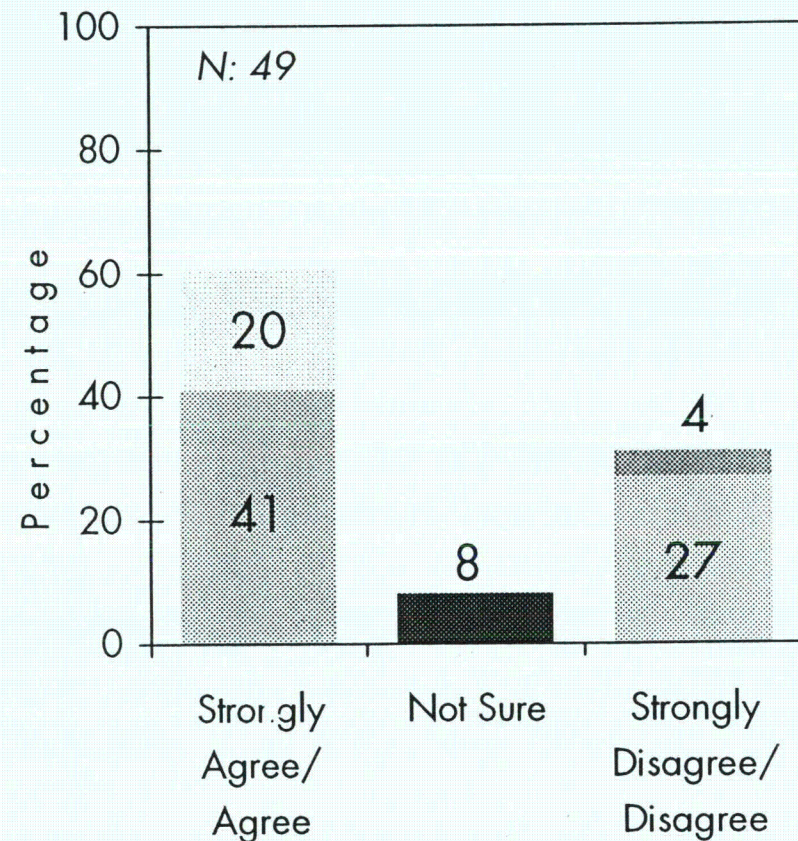


13 (p) At times, pressure from the NRC has caused us to do the wrong thing or to take actions that may actually reduce safety or reliability.

Site Executives

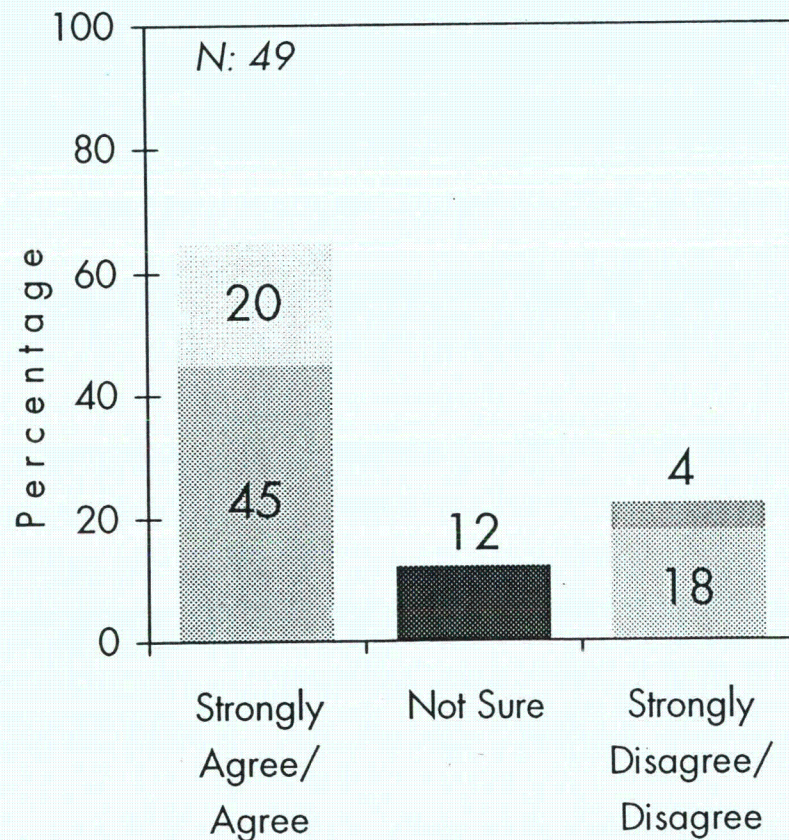


Plant Managers

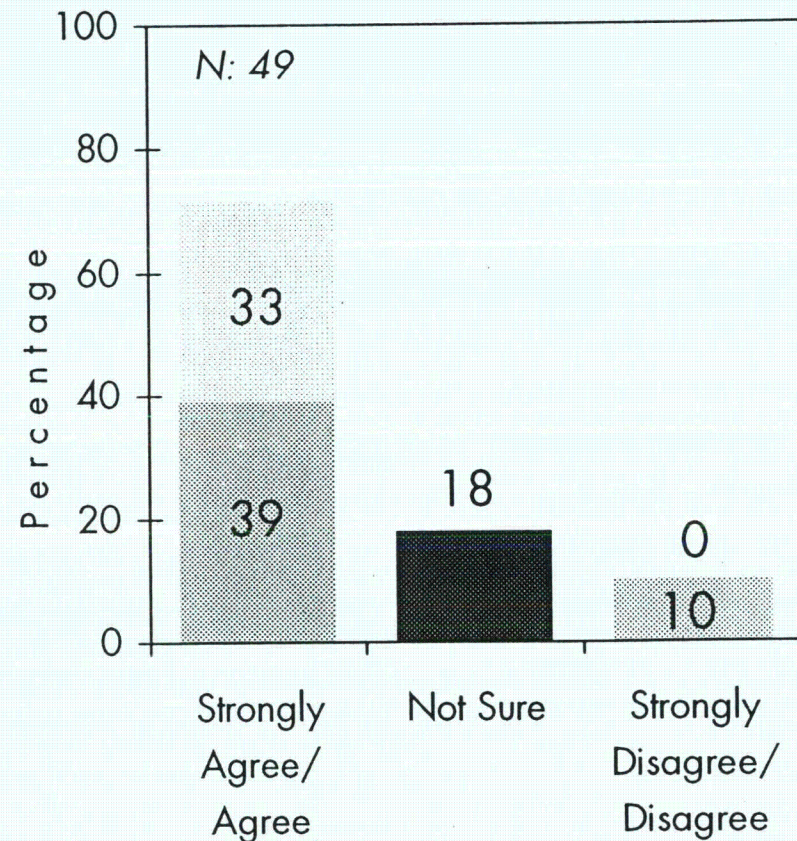


13 (g) NRC senior staff does not know or appreciate the impact of informal regulatory processes and regulatory activities on plant resources.

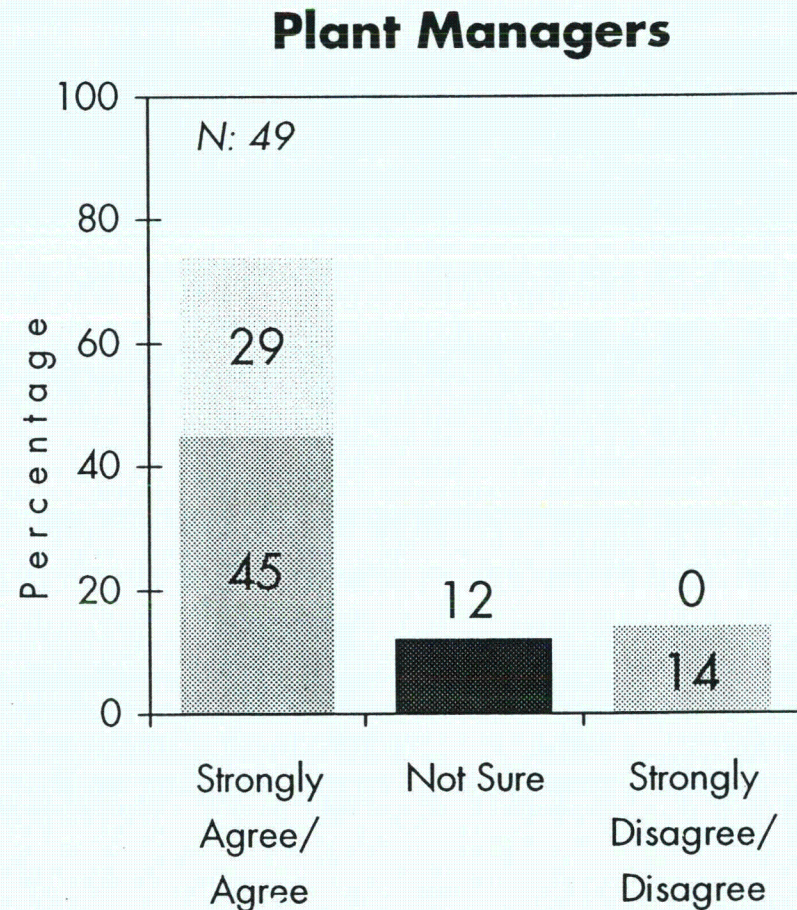
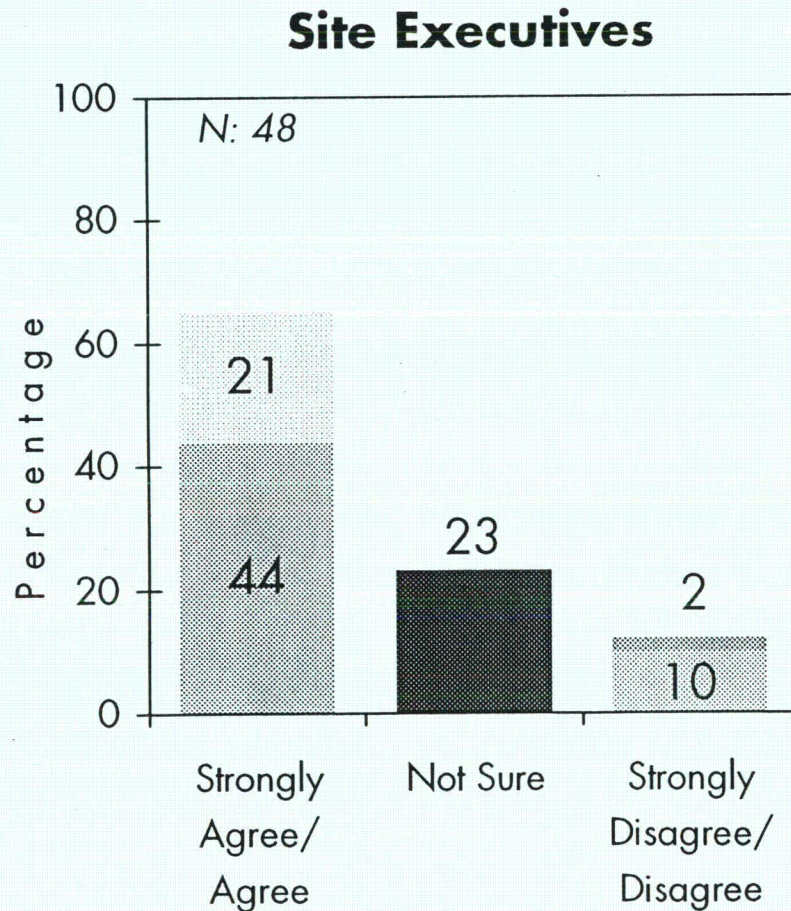
Site Executives



Plant Managers

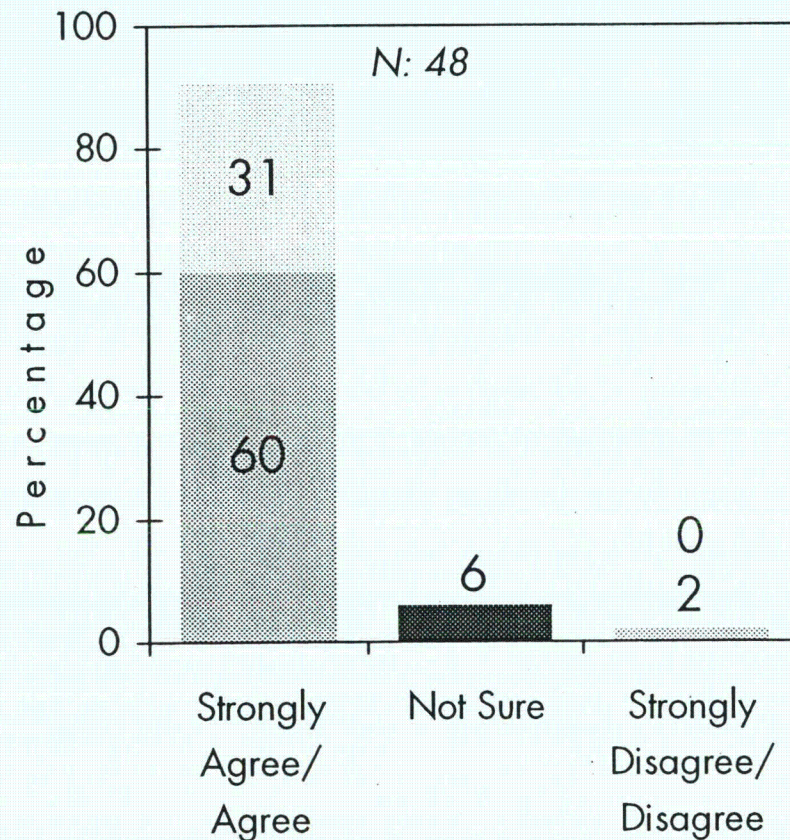


24 (c) When NRC decides a plant has serious problems, it increases the intensity of inspections to the point that NRC's concern becomes a "self-fulfilling prophecy."

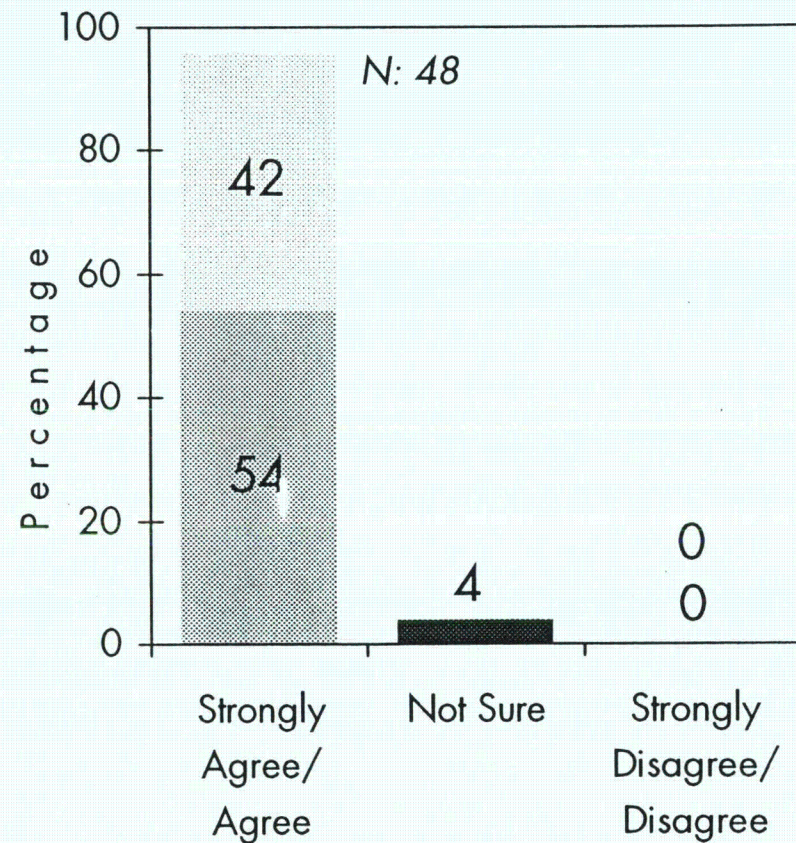


24 (d) Once a plant has significant problems and is placed on the "Watch List," all issues tend to become major in terms of the utility and the NRC.

Site Executives

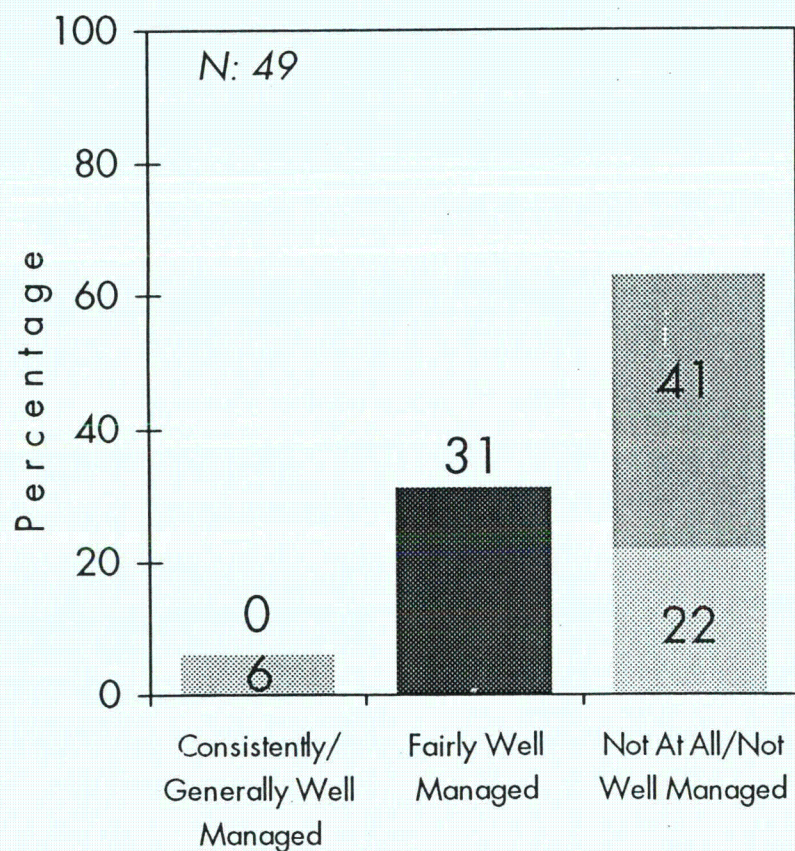


Plant Managers

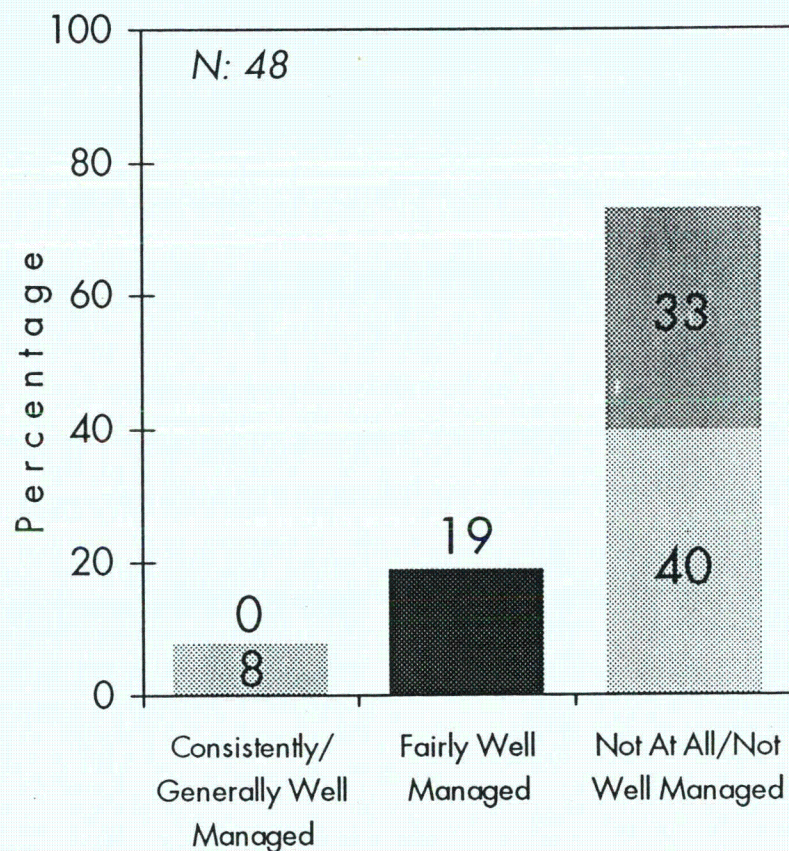


15 NRC field personnel (Regions, Residents) are:

Site Executives

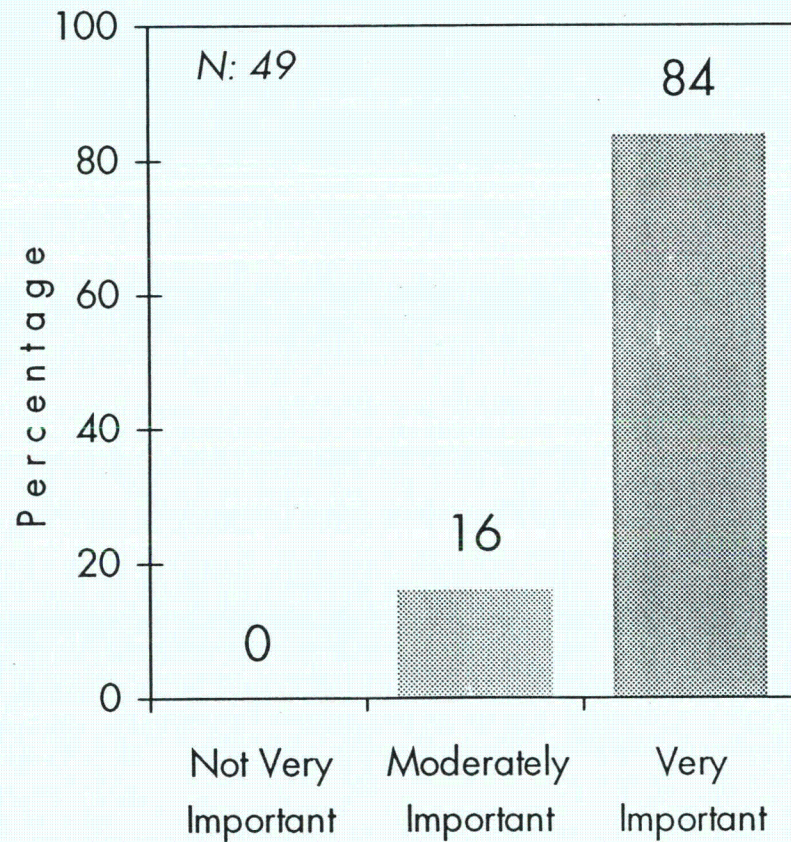


Plant Managers

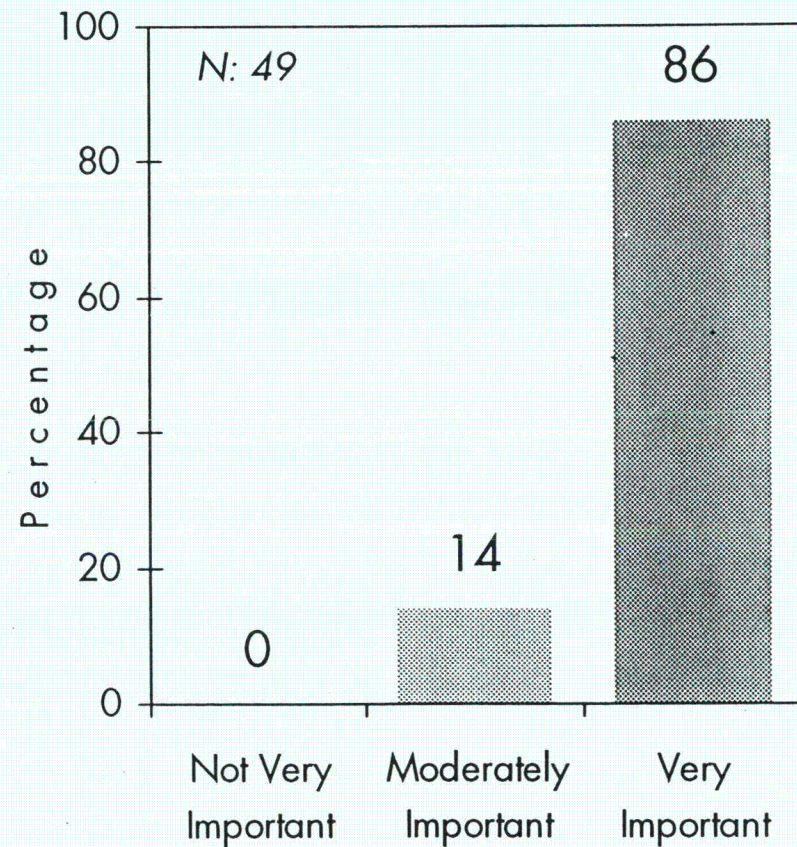


**6 (b) Regarding plant safety, check one answer
for Technical Specifications:**

Site Executives



Plant Managers



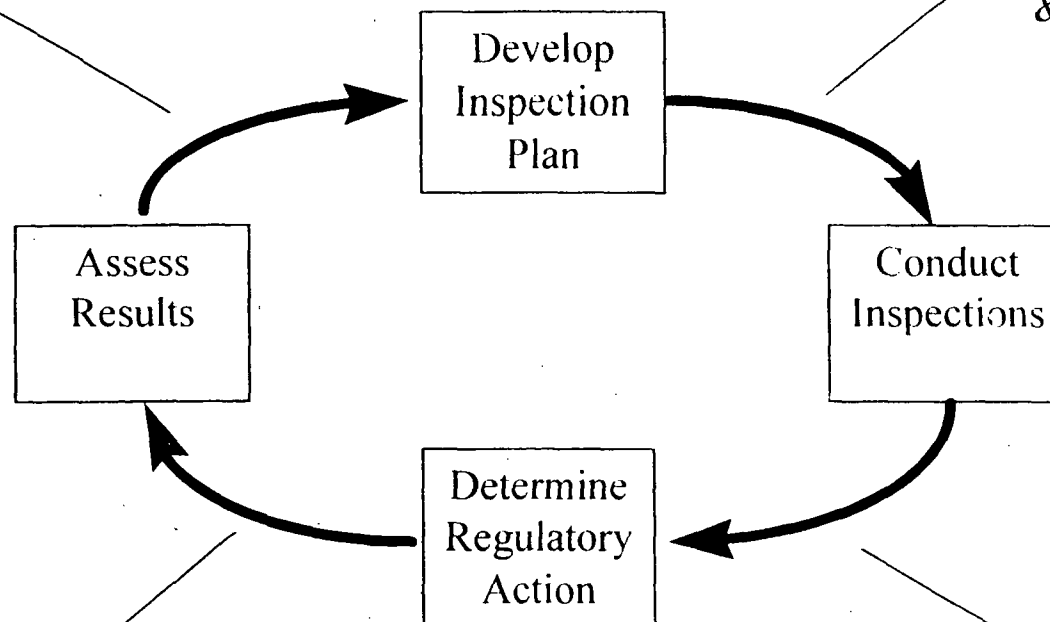
A NEW REGULATORY OVERSIGHT PROCESS

Risk-Informed, Performance-Based Assessment, Inspection and Enforcement

Regulatory Oversight Model

Licensee Provide
Self Assessment &
Audit Plans

Licensee Provide
Self Assessments
& Audit Results



Licensee Provide
Safety Performance
Indicators

Licensee Assess
& Correct
Deficiencies

INDUSTRY GOALS FOR THE REGULATORY ENVIRONMENT

- o Credible Regulatory Agencies (as viewed by public, Congress and industry)
- o Mutual confidence and trust in the regulatory process (non-adversarial relationship)
- o Consistency, predictability and stability of the regulatory process
- o Full recognition of industry self-improvement by regulatory agencies
- o Clear definition of NRC/industry roles (common goal is safety)

INDUSTRY PERCEPTIONS

- o Increased number of rules and regulatory actions
- o Some regulatory actions circumvent proper rulemaking processes
- o Advice of experts and advising bodies not properly utilized (e.g., ACRS, NCRP, UL, etc.)
- o The acceptable regulatory standard is a changing target above compliance with rules
- o Basis of many actions is staff/inspector opinion or interpretation
- o Bulletins and generic letters are misused
- o NRC actions/requests made with little regard for real impact on management, people or cost

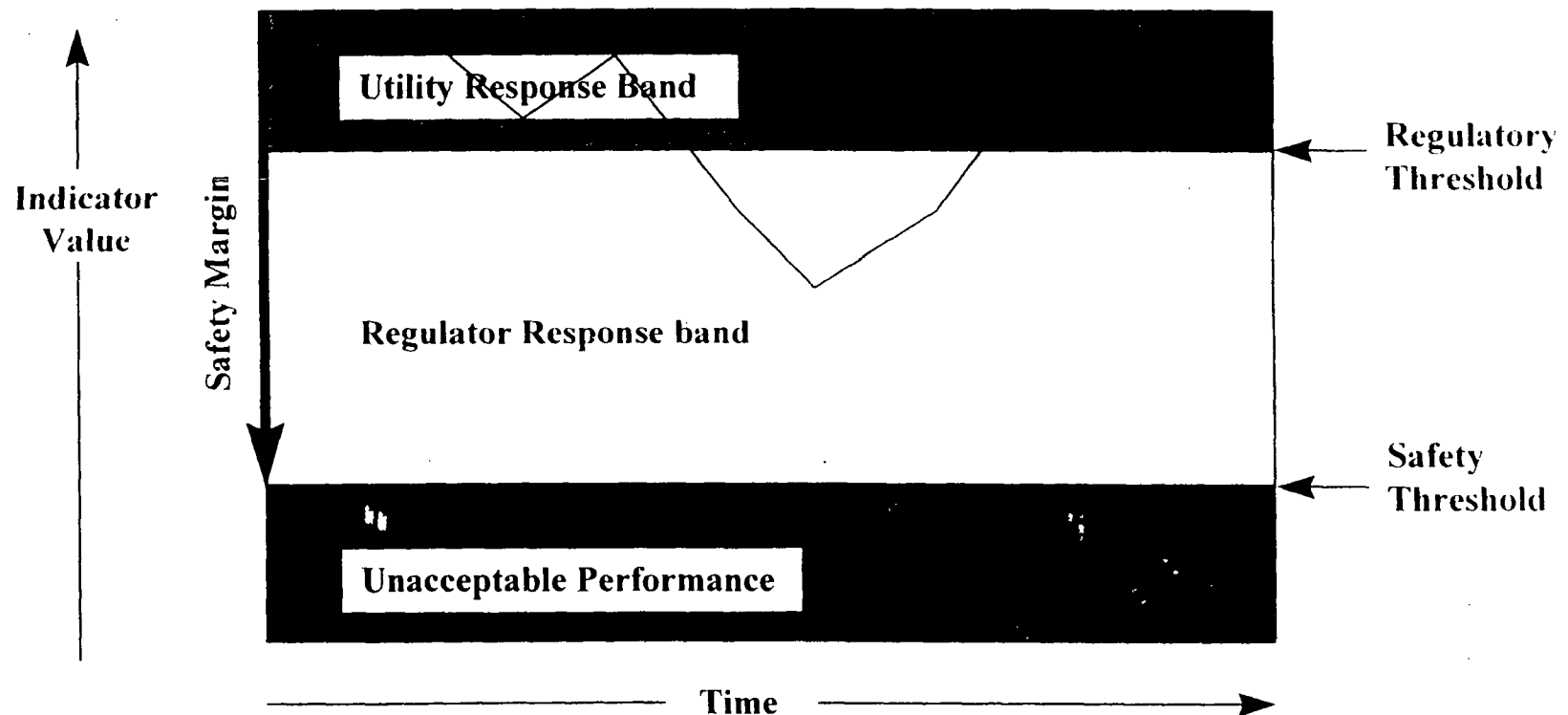
INDUSTRY PERCEPTIONS (Continued)

- o Inconsistency between headquarters and regions
- o NRC inspection efforts increased significantly and have more impact on plant
- o NRC injecting itself into utility management issues and management decisions
- o NRC not responsive to industry needed changes

A NEW REGULATORY OVERSIGHT PROCESS

Risk-Informed, Performance Based Assessment, Inspection and Enforcement

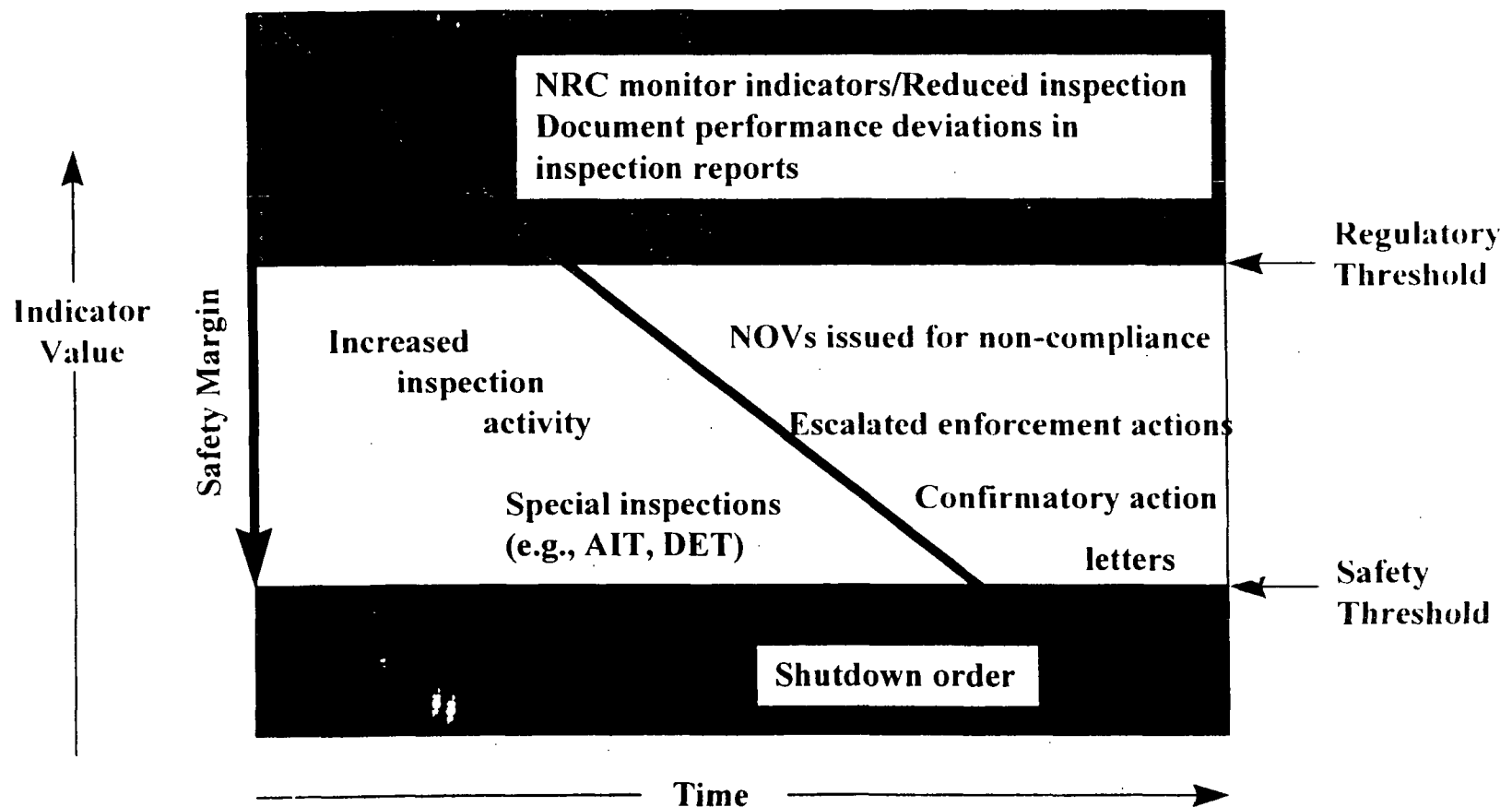
Performance Response Bands



A NEW REGULATORY OVERSIGHT PROCESS

Risk-Informed, Performance Based Assessment, Inspection and Enforcement


Regulatory Action Model



A NEW REGULATORY OVERSIGHT PROCESS

Risk-Informed, Performance-Based Assessment, Inspection and Enforcement

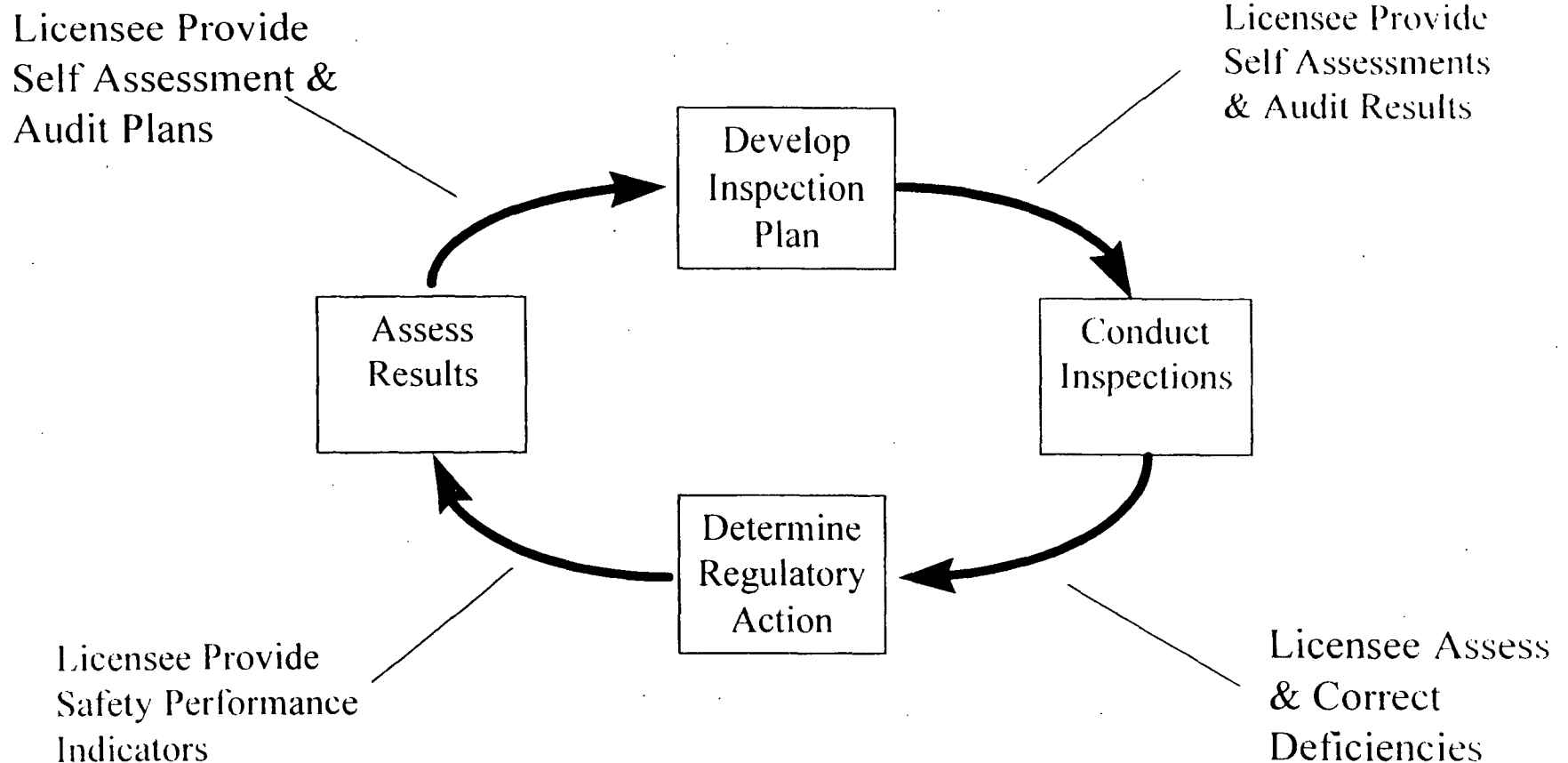
Performance Indicators

LEVEL	PERFORMANCE EXPECTATIONS	SAFETY PERFORMANCE INDICATORS			
LEVEL I PUBLIC HEALTH AND SAFETY	BARRIER INTEGRITY	REACTOR COOLANT SYSTEM ACTIVITY	REACTOR COOLANT SYSTEM BOUNDARY	CONTAINMENT INTEGRITY	
LEVEL II MARGIN TO SAFETY	OPERATING CHALLENGES	TOTAL SCRAMS	SAFETY SYSTEM ACTUATIONS	SHUTDOWN OPERATING MARGIN	OPERATING TRANSIENTS > 15%
	MITIGATION CAPABILITY	MAINTENANCE RULE HIGH RISK SIGNIFICANT SSC PERFORMANCE			
LEVEL III OVERALL PLANT PERFORMANCE	PLANT PERFORMANCE TREND				

A NEW REGULATORY OVERSIGHT PROCESS

Risk-Informed, Performance-Based Assessment, Inspection and Enforcement

Regulatory Oversight Model



Summary

Nuclear plant performance is a function of management effectiveness more than it is a function of plant age, reactor type, and other factors.

All plants can develop comprehensive corrective action plans. Good management ensures that the plans are implemented properly and revised as necessary such that the desired objectives are obtained. Bad management allows the plan to get waylaid by emerging issues such that schedule or quality, or both, suffer. Good management uses yardsticks to measure the effectiveness of changes, whether physical or administrative) implemented at their plants. Bad management does not.

Good management establishes objective standards, which are clearly and consistently communicated to plant workers. Bad management sends unclear or mixed messages (i.e., either standards are vague/ill-defined – like 'excellence' – or objectives cannot be attained with resources devoted to projects).

Good management establishes clear accountability, or ownership, for issues. Bad management does not, leading to confusion, frustration, ineffectiveness, and delays as things get sorted out.

Good management provides workers with effective procedures and policies such that most items can be processed through normal channels. Bad management does not, which forces the majority of items to be hand-carried through the process.

NRC regulatory performance is a function of management effectiveness more than it is a function of staff size, structure, and other factors. Unfortunately, the NRC staff more closely resembles bad management than good management:

- The NRC staff develops corrective action plans, but fails to adequately monitor them to ensure the stated objectives are obtained (examples: enforcement policy, 2.206 and allegation processes have been revised in recent years, but are no better than they were a decade ago).
- The NRC staff does not consistently enforce criteria whether they are 10 CFR 50 regulations or NRC policies (examples: D C Cook is currently shut down for ice condenser problems identified at the Watts Bar, Sequoyah and McGuire plants, which continue to operate).
- The NRC staff seems to lack clearly defined accountability (example: UCS allegation involving Millstone Unit 3 was purportedly 'handled' by NRR until the week after the restart vote, then it was passed back to RI).
- The NRC staff suffers from a lack of continuity (example: allegations, 2.206 petitions, and issues raised by UCS get routinely re-assigned from one interim or transient person to another).

Inspection and Enforcement

Inspection program is flawed because inspection reports do not accurately reflect inspection findings.

Examples: Maine Yankee ISAT (10/96), Dresden assessment (late 96)

Inspection program is also flawed because inspection reports are primarily dictated by NRC's general impression of the plant's performance.

Example: D C Cook – virtually every inspection report issued since January 1998 has included one or more violations. In the two years prior to 1998, fewer than half of the inspection reports contained violation(s). Most of the violations cited in 1998 are not for new problems, but are for longstanding material condition or administrative control problems. The 'floodgates' at D C Cook are now open.

Enforcement process is badly broken because it is inconsistent and untimely.

Examples: By policy, licensees who implement good corrective actions in a timely manner (i.e., do what the law requires) can have their civil penalties totally waived. By practice, licensees who run up a huge tab (e.g., Millstone's \$2.1 million fine) receive a discount because of their protracted outages. The middle-of-the-road plants are the only ones paying full fare.

Largest single failure of inspection and enforcement programs is that they lack credibility. From the public's perspective, credibility will never be restored as long as NRC staff steadfastly maintains that every violation and event lacks safety significance. The public simply does not believe that the NRC would fine a utility \$2.1 million for "safe" behavior.

Use of Performance Indicators and Performance Assessment

NRC staff does not need a new or revised performance assessment process – it needs to do something tangible when the process being used indicates a licensee is not performing adequately.

Examples: Millstone, Salem, and the Watch List perennial Dresden Recall Mr. Kenyon's comment to the Commission that he found NU to be the most dysfunctional organization he ever saw. If Mr. Kenyon could reach that conclusion during his first week at NU, NRC staff must have known that Millstone was in trouble.

Development of Risk-informed Regulations and Regulatory Policies

Risk-informed regulation cannot proceed unless the risks are known. Until plants are generally in conformance with their design and licensing bases such that their Individual Plant Examinations are valid, risk-informed regulation cannot be implemented.

Examples: Pilgrim, Vermont Yankee, and D C Cook all responded to NRC's October 9, 1996 50.54(f) letter on design bases information by stating that they everything under control:

- Subsequent NRC inspection showed that Pilgrim did not have strong control over design bases and consequently was performing 'weak' operability determinations. Pilgrim committed to DBD effort.
- NRC A/E inspection revealed numerous shortcomings in design bases control at Vermont Yankee. Vermont Yankee committed to expanded, revamped DBD program.
- NRC A/E inspection triggered shut down of both units at D C Cook. Both units are likely to remain shut down for over a year while extensive plant and administrative changes are made.

All of these plants had previously submitted their IPEs in response to NRC Generic Letter 88-20. Yet these findings unequivocally demonstrate that these risk assessments were useless because they did not accurately reflect the actual plant conditions.

During the current design bases Amnesty Program, licensees have reported literally dozens of design bases problems that dated back to original construction. Many of these problems required physical plant changes or procedure revisions to correct. These deficiencies are reality, yet the IPEs do not account for these common-mode failures. Risk assessments should account for all possible failure modes, not just the mathematically convenient ones.

The industry is lengthening surveillance and inspection intervals based on empirical database of equipment failure rates. However, these activities have also detected cases of sabotage and inadvertent component mispositioning. It is not apparent that the justification for longer testing and inspection intervals has accounted for these other risk factors. Risk-informed regulation must include all risks.

Timeliness of NRC Processes

NRC staff should not establish timeliness goals unless it also provides resources and oversight necessary to ensure that time frames are not met at the expense of quality.

Example: Recent emphasis on closing allegations within 180 days may be causing a high percentage of them to be closed without the underlying issues being addressed.

Whenever possible, NRC staff should live by same timeliness standards mandated for licensees.

Example: Per 10 CFR Part 21, licensees have up to 60 days from discovery of a potential safety hazard to justify why it is not a problem or report it to the NRC. The NRC, upon receipt of a 10 CFR Part 21 report, can and will evaluate it at a much more leisurely pace.

Imagine that you are a parent picking up your child from elementary school. You stand on the corner watching your son or daughter in the cross-walk heading towards you. Suddenly, there's the sound of squealing tires and a racing engine. A car darts out of a side street. Before you can react, it speeds into the intersection. For a few seconds, your child is hidden from sight as the car hurtles past. After an endless moment, the car disappears from view and you see your child – unharmed, but visibly shaken by the near-miss.

In that split second of horror, you noticed that I was driving the car. It's safe to assume that you voiced your concerns about my driving the next time you saw me. Think about your reaction if I had dismissed your concerns with a discussion about the dry pavement conditions, the quick response from rack and pinion steering, the unobstructed vision through my windshield, and my excellent driving record. Chances are pretty good that you might have mentioned that your child could have reacted to my recklessness by running towards the safety of your arms, into the path of my car. Refusing to be drawn into such pointless 'what if' scenarios, I responded, "look, you just don't want to discuss this matter rationally. I missed your kid by a good foot, foot and a half. Get over it." Half of this audience probably would have punched me in the nose. I think that all of you would have wanted to slug me, but I'm guessing that I could out run half of you.

The moral of this story is that safety margin is not just something that you measure or quantify and just dismiss so long as the number is positive. There's another component to safety margin which I call comfort level. Comfort level is very subjective. It is also a function of perspective. As the driver, I had a high comfort level because I saw your child and I knew I had plenty of room to evade any sudden movements. Standing on the corner, you had a low comfort level, and high distress level, because you only saw a speeding car too close to a loved one.

But, enough about my driving skills. Let's turn to the subject of today's session – reactor safety margin. Part 50 to Title 10 of the Code of Federal Regulations defines minimum acceptable safety standards for nuclear plant operation. These minimum standards do not result in zero risk, but reduce the risk from nuclear plant operation to an acceptably low level.

<FIGURE 1>

The minimum acceptable safety standards essentially draw the upper line for what is called "reactor safety margin." The lower line is crossed when one or more members of the public is exposed to excessive amounts of radiation. A nuclear plant operating at or above the minimum standards can experience a transient or accident with reasonable assurance that public health and safety will not be affected. In other words, the transient or accident will, in all likelihood, cause the plant to drop below the minimum standards and use up some of its reactor safety margin, but there is reasonable assurance that the important lower line will remain intact.

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UCS Presentation at 1998 ANS Annual Meeting Reactor Safety Margins

UCS believes that the upper and lower lines for reactor safety margin are acceptably drawn. We do not necessarily advocate raising the minimum acceptable safety standards to provide additional reactor safety margin, although quite honestly we would not strenuously oppose any such efforts. We are truly concerned, however, that too many nuclear plants are venturing too often, and too far, below the upper line into their reactor safety margins.

<FIGURE 2>

For example, there have been numerous findings recently that safety related equipment would or may not have functioned as required during an accident. Maine Yankee discovered in 1996 that 16 feet of control cable had been inadvertently cut and removed three to four years earlier. The missing cable would have prevented the high pressure injection (HPI) pump from automatically starting in event of an accident. In 1995, boiling water reactors began correcting a problem with the suction strainers for their emergency core cooling system pumps. Debris such as insulation blown off piping could have plugged the strainers and disabled all of the pumps during an accident. And Millstone Unit 3 recently completed over 70 physical changes to the plant and made several hundred changes to its Final Safety Analysis Report to get the facility back above the minimum acceptable safety standards.

The NRC and the industry invariably tell the public that these violations are little cause for alarm. These positions talk about defense-in-depth and probabilities. Even if the public understood, yet alone believed, these complex arguments, they would still be unsatisfied by them. These arguments fail to adequately address the comfort level component of reactor safety margins. All of my reasons for thinking that I did not unduly jeopardize your child may be sincere and valid, but they are tossed aside in a heartbeat when someone, or perhaps that inner voice we all have, says, "sure he missed your kid *this* time, but what about *next* time?"

<FIGURE 1>

Nuclear plant problems are almost always evaluated by the NRC and the industry on the basis of the as-built reactor safety margin. The as-built reactor safety margin is that margin which exists when the plant meets the minimum acceptable safety standards – the upper line. When a problem leaves the plant at or above the upper line, then that approach is valid. We would agree that the public was protected *this* time and would probably be protected *next* time.

But some problems drop plants below the upper line. In these cases, the as-found reactor safety margin must be considered. We define the as-found reactor safety margin as the margin existing with the plant in its degraded condition. For some of the events that have been recently reported, the nuclear plants did not satisfy the minimum acceptable safety standards. Had these plants experienced an accident starting from those degraded conditions, it seems possible that the lower line might have been crossed.

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UCS Presentation at 1998 ANS Annual Meeting Reactor Safety Margins

We really should not debate whether the lower line would have been crossed. We all have both a legal and moral obligation to the public to *know* that answer. Not to guess, not to presume, but to *know* the answer. When a problem is discovered that indicates a plant operated below the upper line, we must know the as-found reactor safety margin for that degraded condition. We must also know whether the lower line would have been crossed had the plant experienced an accident from that degraded condition. [In other words, would an accident initiating from the degraded plant condition ended up at Point A' or B' on Figure 1?]

There probably will be times when the answer indicates that the lower line would have been crossed. That will clearly be bad news which will not please the public. But by self-identifying and reporting these near-misses, the nuclear industry will regain the public's confidence. The public will then be more receptive to the industry's explanations about corrective actions and recurrence control measures.

If the NRC and the industry continue to discuss problems only in the context of as-built reactor safety margins, then UCS's job becomes very simple. All we have to do is point out, "sure the plant didn't kill you and your family *this* time, but what about *next* time?" We may not be quite so blunt, but that will be our basic message.

I challenge the nuclear industry and the NRC to make my job as difficult as possible. Please take the "next time" message away from me. When reporting problems, talk about the as-found reactor safety margin. Not the as-built safety margin, but the actual safety margin for the plant. Explain what would have happened had an accident occurred with the plant in its degraded condition. If public health might have been affected, say so.

The harder you make me work in that way, the easier you'll find it to regain some public trust. Perhaps, they would even come to accept license renewal, stranded cost recovery, and giving nuclear plants some credit for avoiding air emissions.

I began my speech asking you to picture yourself on the sidewalk while I raced past your child in my car. It turns out that *you* are in the driver's seat, not me. If you start delivering responsible, credible messages in response to nuclear plant events, the public may even stop punching you in the nose.

Figure 1

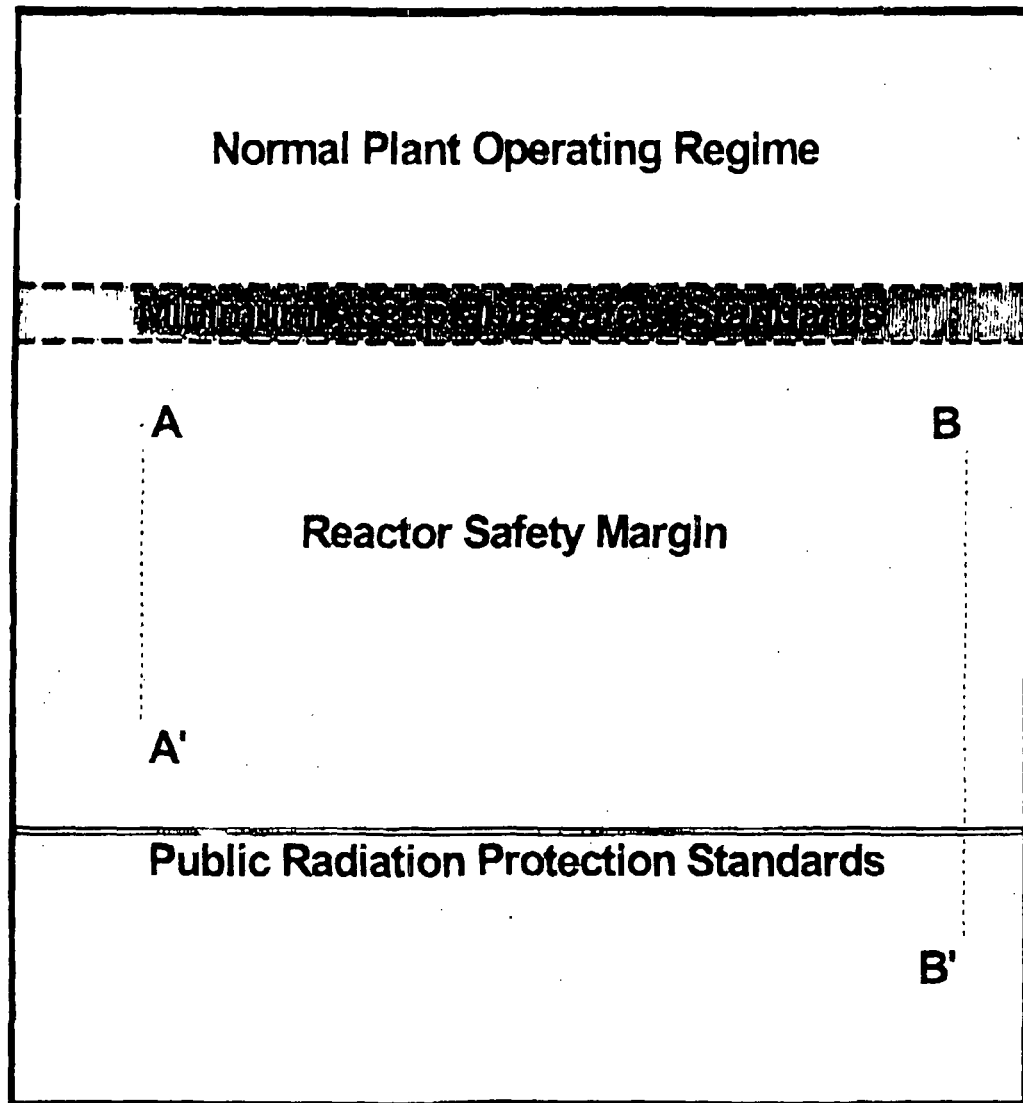


FIGURE 2

Recent Examples of Safety-Related Equipment Problems

□ **BWR Suction Strainers**

NRC Bulletin No. 95-02 reported in October 1995:

- incidents at Perry, Limerick, and Bresebeck involved actual blockage of ECCS pump suction strainers in suppression chambers during plant transients
- potential in all BWRs for debris such as piping insulation to be transported to suppression pool during accident and blocking suction strainers
- common mode failure affecting all ECCS pumps taking suction from suppression pool

□ **Maine Yankee**

NRC Independent Safety Assessment Team (ISAT) reported in October 1996:

- cooling water system for safety-related equipment did not support operation above 90% power (although plant had routinely operated above 90% power since June 1978)
- 16 feet of cable in high pressure injection (HPI) pump control circuit had been inadvertently cut and removed 3 to 4 years earlier during an unrelated modification, preventing the pump from automatically starting during an accident

□ **Millstone Unit 3**

NU informed NRC on May 1, 1998 of the following events during the recent extended shutdown on Millstone Unit 3:

- over 200 modifications completed – over 70 modifications as a result of configuration management program
- over 2,000 configuration management items completed
- 140 licensee event reports (LERs) submitted for licensing bases violations including 19 of moderate and high safety significance